$20.00

THE POWER IS IN THE PUMP!

AMERICAN TURBINE

SERVICE MANUAL

DOMINATOR JET

JACUZZI ENERGIZER

LEGEND JET-DRIVE

WE HAVE REPLACEMENT PARTS FOR:
AMERICAN TURBINE
DOMINATOR
BERKELEY
OEM JACUZZI
JACUZZI ENERGIZER

AMERICAN TURBINE
PO BOX 699
3692 RIVERSIDE DR.
ASOTIN, WA 99402
PHONE: (509) 243-5387
FAX: (509) 243-5391
INTERNET: WWW.AMERICANTURBINE.COM

AMERICAN TURBINE

TERMS, CONDITIONS, & LIMITED WARRANTY

PAYMENT TERMS
C.O.D. Cash or Cashiers Check will be required. We do accept Visa or MasterCard. Business checks will be accepted after approval by our business office for payment by check. A check writing application is available by calling (509) 243-5387.

FREIGHT
Carrier will be selected by AMERICAN TURBINE unless otherwise requested by customer. All shipments will be F.O.B. Asotin, WA, 99402. Claims for shortages or errors in shipment must be reported within 48 hours of receipt of shipment for any adjustments to be considered. Shipment damage must be made directly with the freight company. Freight companies require inspection of the original container in which the product was shipped. DO NOT return the damaged merchandise to AMERICAN TURBINE as it will not be accepted.

REFUSED SHIPMENTS
Shipments returned to AMERICAN TURBINE marked refused, or not in when driver called, will cause the customer's buying status to be halted until all freight, C.O.D., and handling charges are paid in full. Refusal of a shipment does not relieve a customer of liability for paying these charges. Repeated returned shipments of this type will cause the customer's buying status to be permanently revoked.

RETURNS
Products may be returned for credit only by written confirmation. There will be a 15% handling charge on all merchandise returned to us, unless prior arrangements have been made. Merchandise must be returned prepaid freight, accompanied by a photo copy of the original invoice on which it was purchased. Only current saleable parts may be returned. Special orders or custom orders may NOT be returned. You must have a RETURN GOODS NUMBER (RGN) on the package. NO RETURNS AFTER 30 DAYS.

WARRANTY
AMERICAN TURBINE'S limited warranty statements are available upon request from factory.

PRICES
All prices are subject to change without written or verbal notice. Our price catalogs are intended for use as a guideline only. Price catalogs and sheets are often partially outdated by the time they are printed. All products will be shipped at the price in effect regardless of what the latest price catalog reflects.

OEM/DEALER DISCOUNT QUALIFYING
To receive the AMERICAN TURBINE price discount, request the OEM/DEALER qualifying letter and application from our business office.

1. American Turbine, Inc. warrants, to the first original retail purchaser, each new American Turbine jet drive unit manufactured by American Turbine, Inc. to be free from defects in material and workmanship.
2. The warranty extends for 12 months from the date of purchase.
3. Claims under this warranty shall be made by returning the defective part freight prepaid to American Turbine, Inc.
4. Any American Turbine jet drive or part determined to be defective in either workmanship or material during the warranty period will be repaired or replaced at American Turbine, Inc.'s option, without charge for parts or labor. American Turbine, Inc.'s liability shall be limited to repairing or replacing part found to be defective during the warranty period.
5. American Turbine, Inc. reserves the right to change or to improve the design of any American Turbine, Inc. product without assuming any obligations to modify such units previously manufactured.

EXCLUSIONS AND LIMITATIONS
This warranty does not apply to:
1. Any part, accessory or product not manufactured by American Turbine, Inc., And for which Manufacturer warranty has been supplied to the consumer by the respective manufacturer.
2. Normal Maintenance items such as lubrication and adjustments necessary as a result of normal wear and tear.
3. Any jet drive or part that has been modified, altered, or repaired by other than American Turbine, Inc.
4. Products damaged as a result of misuse, neglect, negligence, accident, freezing, normal wear and tear, corrosion, improper installation, operation with lubricants which are not suitable for use with the jet drive, failure to operate and maintain the product in accordance with the owner's manual supplied with each new American Turbine, Inc.'s product, products used for racing, damage resulting from debris, or other substances entering through the jet drive, operating the jet drive at RPM in excess of the maximum rated RPM as stated in the owners manual, or any case other than a defect in the manufacture, material, or assembly of an American Turbine, Inc.
5. American Turbine, Inc. shall not be liable for any incidental, consequential or other damages whatsoever, including but not limited to: loss of use, loss of time, inconvenience, cost of returning the defective product to American Turbine, Inc., travel, lodging, or damage to personal property.
6. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.
7. This warranty is the only express warranty applicable to American Turbine, Inc. products, and is in lieu of any other express or implied warranties, including warranties of merchantability and fitness
for a particular purpose. All implied warranties are limited in duration to minimum period required by State law. American Turbine, Inc. neither assumes or authorizes any other person to assume for it any other liability or warranty in connection with its products,
8. Some states do not allow limitations on the duration of implied warranties, so the above limitations may not apply to you.
9. This warranty gives you specific legal rights, and you may also have other rights which may vary state to state.

AMERICAN TURBINE

APPLICATION QUESTIONNAIRE

If you wish to consider drives for any current or future project, we would be pleased to review the hull and intended power and provide recommendations for the appropriate drive model and to provide estimates of anticipated performance. Please print and complete this Applications Questionnaire and fax to (509) 243-

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Name: _____ Telephone: _____

Company: _____ Fax: _____

Address: _____ E-Mail: _____

_____ _____

HULL DETAILS:

Laden Displacement:	_____	ton / kg / lb.	_____	Planing Mono Hull
Lightship Displacement:	_____	ton / kg / lb.	_____	Semi-planing Mono
Waterline length (LWL):	_____	meters / feet	_____	Planing Catamaran
Waterline beam:	_____	meters / feet	_____	Semi planning Cat.
Deadrise at mid-waterline:	_____	degrees	_____	Displacement Craft.
Deadrise at transom:	_____	degrees	_____	Other (describe below)
Transom Angle:	_____	degrees	_____	Composite
Draft at transom:	_____	meters / feet	_____	Aluminum
Frontal Area:	_____	sq.m / sq. ft	_____	Other
Required Boat Speeds:	_____	Knots Laden	_____	Knots Lightship

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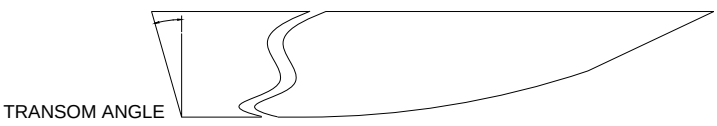
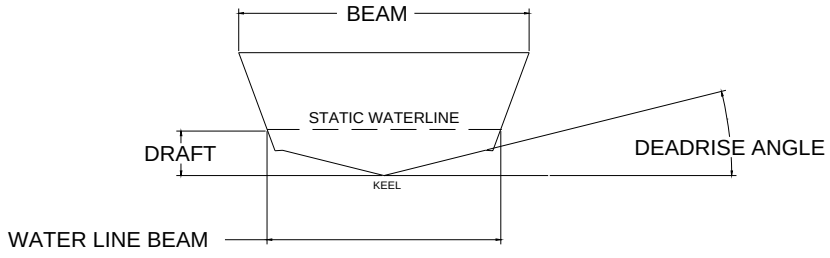
ENGINES:

Single _____ Twin _____

Make: _____ Model: _____

Max. Power: _____ hp / kW @ _____ rpm

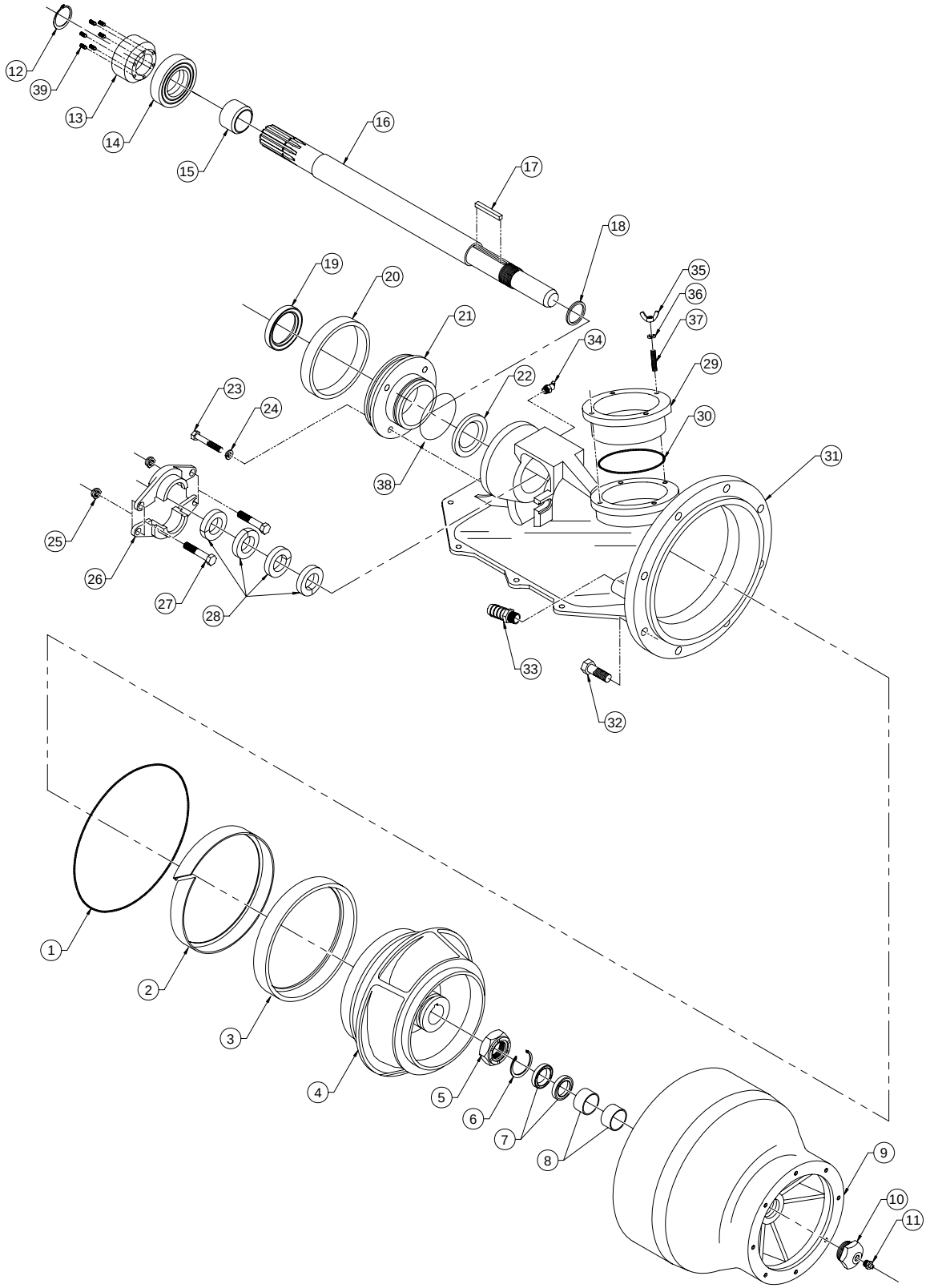




AMERICAN TURBINE

MODEL AT-309 JET (W / HP BEARING)

USED W / SERIAL # 25649 - PRESENT



AMERICAN TURBINE

MODEL AT-309 JET (W / HP BEARING)

USED W / SERIAL # 25649 - PRESENT

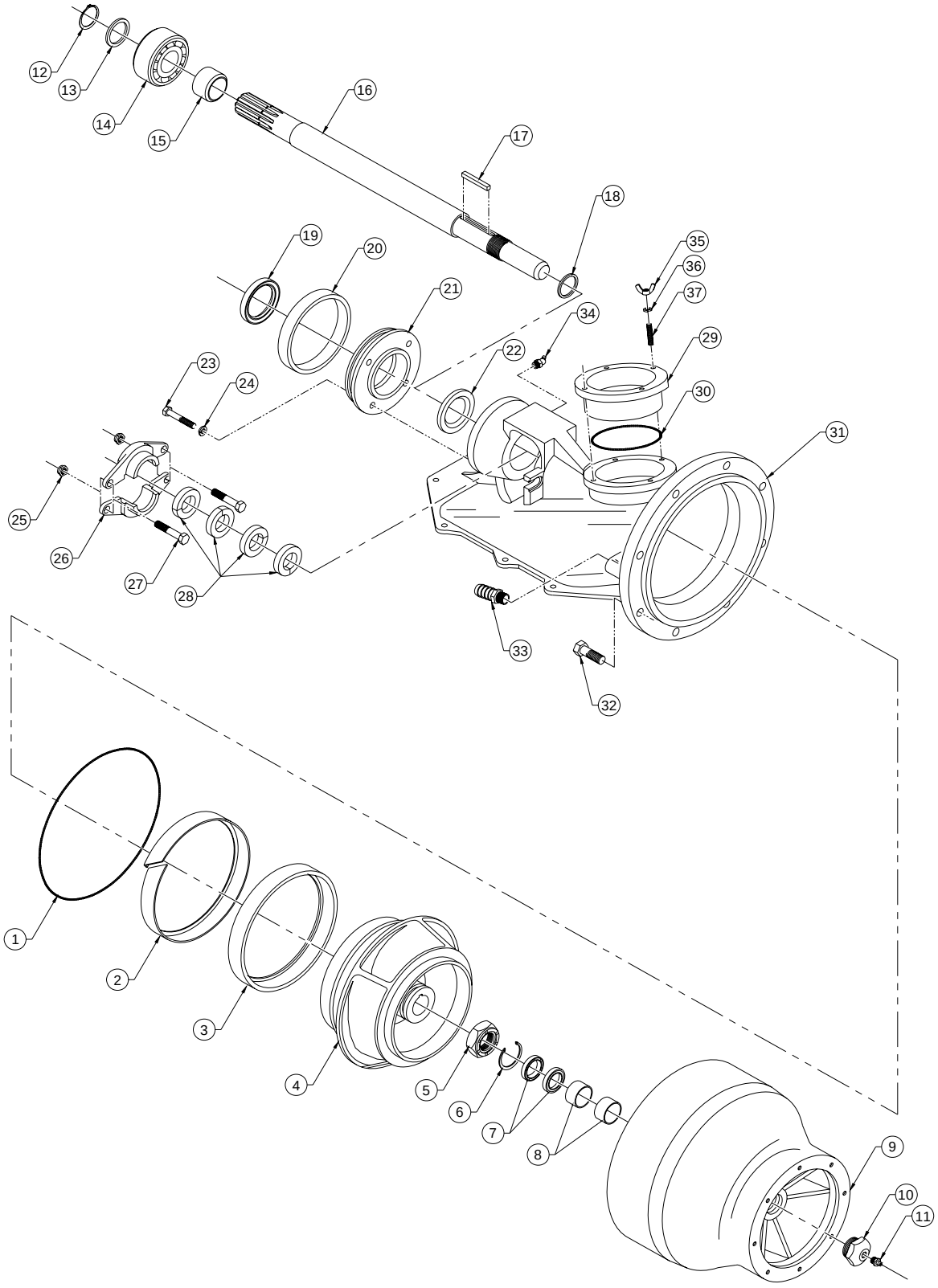
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	O-RING BOWL	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEALS	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	GREASE ZERT	1	SC8901
12	SNAP RING	1	SH1507
13	BEARING PRE-LOAD SEAL RING	1	SH5005
14	THRUST BEARING	1	B1107
15	SLINGER RING	1	SH2507
16	SHAFT	1	SH1007
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1001
20	ENGINE MOUNT RING	1	SC4007

SYM.	DESCRIPTION	QTY.	PART NO.
21	BEARING CAP	1	SC2107
22	SUCTION SEAL	1	SL1507
23	HHCS, 5/16-18 X 2	4	F05 18 16 HH
24	LOCKWASHER, 5/16	4	F05 LW
25	LOCKNUT, 3/8-24 (THIN)	2	F06 24 TL
26	PACKING FOLLOWER (PAIR)	1	SC2507
27	HHCS, 3/8-24 X 1-3/4	2	F06 24 14 HH
28	PACKING RINGS	4	SC3007
29	HAND HOLE COVER	1	SC1501
30	O-RING HAND HOLE COVER	1	O1001
31	SUCTION PIECE	1	SC1001
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR, 3/8	1	SC4507
34	GREASE ZERT	1	SC8801
35	WING NUT, 5/16-18	4	F05 18 WN
36	LOCKWASHER, 5/16	4	F05 LW
37	SET SCREW, 5/16-18 X 1-1/2	4	F05 18 12 SS
38	O-RING, BEARING CAP	1	O3601
39	SET SCREW, 10-32 X 3/8	6	F03 32 03 SS

AMERICAN TURBINE

MODEL AT-309 JET (W / B1007 BEARING)



AMERICAN TURBINE

MODEL AT-309 JET (W / B1007 BEARING)

LEGEND

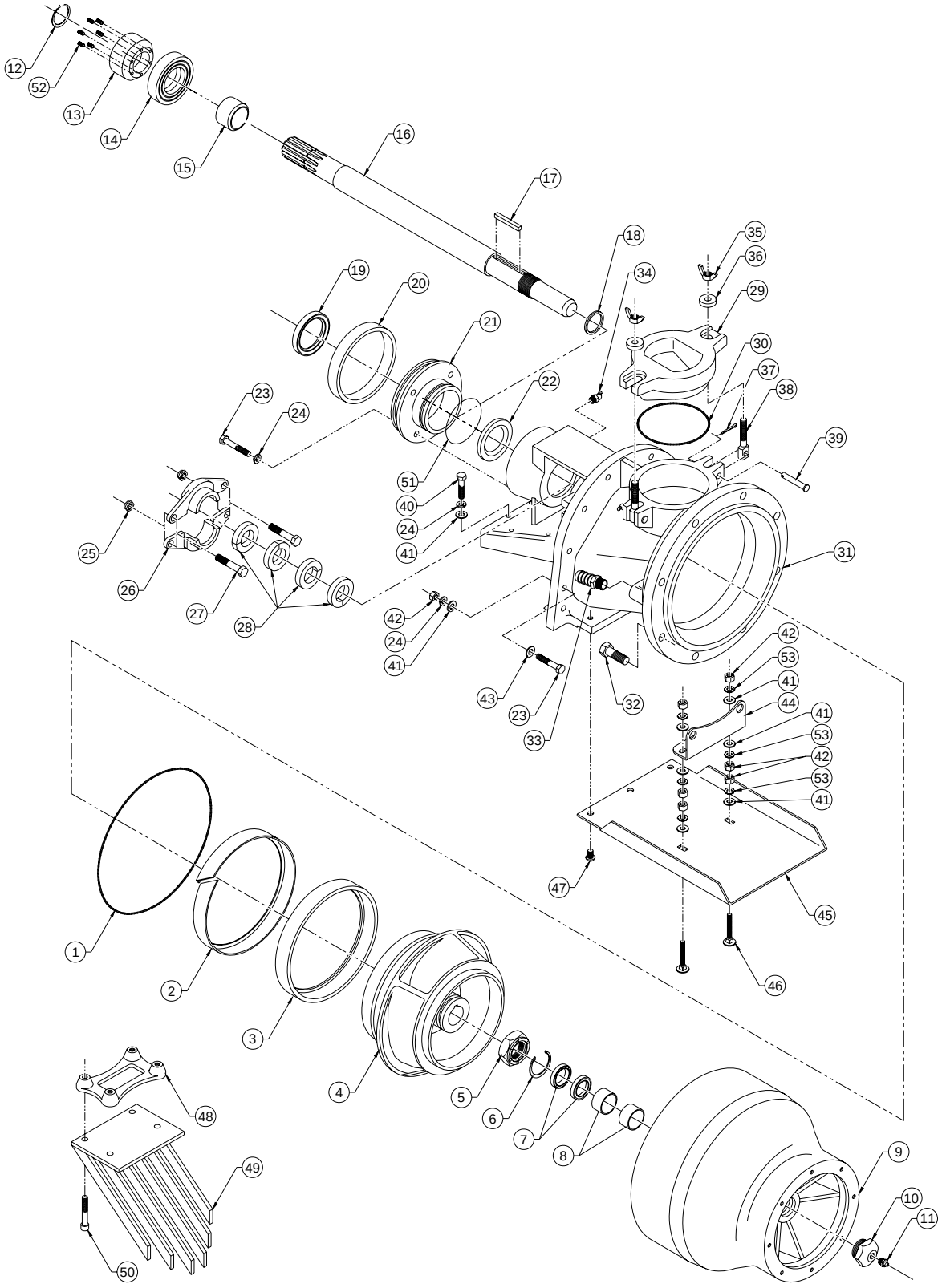
SYM.	DESCRIPTION	QTY.	PART NO.
1	O-RING BOWL	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEALS	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	GREASE ZERT	1	SC8901
12	SNAP RING	1	SH1507
13	THRUST WASHER	1	SH2005
14	THRUST BEARING	1	B1007
15	SLINGER RING	1	SH2507
16	SHAFT	1	SH1007
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1007

SYM.	DESCRIPTION	QTY.	PART NO.
20	ENGINE MOUNT RING	1	SC4007
21	BEARING CAP	1	SC2007
22	SUCTION SEAL	1	SL1507
23	HHCS, 5/16-18 X 2	4	F05 18 16 HH
24	LOCKWASHER, 5/16	4	F05 LW
25	LOCKNUT, 3/8-24 (THIN)	2	F06 24 TL
26	PACKING FOLLOWER (PAIR)	1	SC2507
27	HHCS, 3/8-24 X 1-3/4	2	F06 24 14 HH
28	PACKING RINGS	4	SC3007
29	HAND HOLE COVER	1	SC1501
30	O-RING HAND HOLE COVER	1	O1001
31	SUCTION PIECE	1	SC1001
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR, 3/8	1	SC4507
34	GREASE ZERT	1	SC8801
35	WING NUT, 5/16-18	4	F05 18 WN
36	LOCKWASHER, 5/16	4	F05 LW
37	SET SCREW, 5/16-18 X 1-1/2	4	F05 18 12 SS

AMERICAN TURBINE

MODEL TJ-309 JET (W / HP BEARING)

USED W / SERIAL # 25649 - PRESENT



AMERICAN TURBINE

MODEL TJ-309 JET (W / HP BEARING)

USED W / SERIAL # 25649 - PRESENT

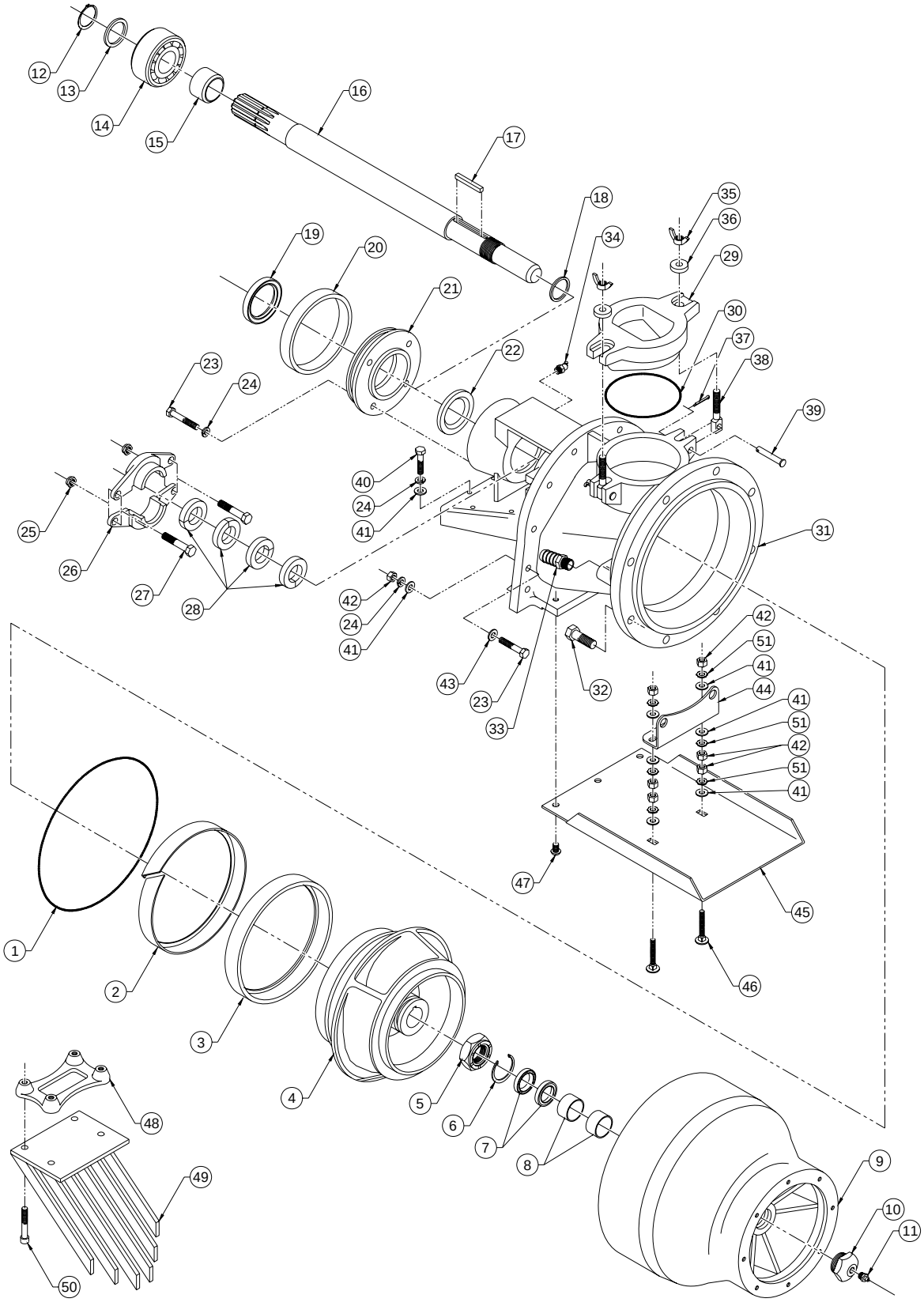
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEAL	2	SL2003
8	BOWL BEARING	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	ZERT	1	SC8901
12	SNAP RING	1	SH1507
13	BEARING PRE-LOAD SEAL RING	1	SH5005
14	THRUST BEARING	1	B1107
15	SLINGER RING	1	SH2507
16	PUMP SHAFT	1	SH1007
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1001
20	ENGINE MOUNT RING	1	SC4007
21	BEARING CAP	1	SC2107
22	SUCTION SEAL	1	SL1507
23	HHCS, 5/16-18 X 2	14	F05 18 16 HH
24	LOCKWASHER, 5/16	20	F05 LW
25	LOCK NUT, 3/8-24 (THIN)	2	F06 24 TL
26	PACKING FOLLOWER (PAIR)	1	SC2507
27	HHCS, 3/8-24 X 2	2	F06 24 16 HH

SYM.	DESCRIPTION	QTY.	PART NO.
28	PACKING RINGS	4	SC3007
29	HAND HOLE COVER	1	SC1701
30	O-RING	1	O1002
31	SUCTION PIECE	1	SC1403
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR, 3/8	1	SC4507
34	GREASE ZERT	1	SC8801
35	WINGNUT, 3/8-16	2	F06 16 WN
36	THICK WASHER, 3/8	2	F06 TW
37	COTTER PIN, 1/8 X 1/2	2	F02 04 CP
38	EYE BOLT, 3/8-16	2	F06 16 EB
39	CLEVIS PIN, 5/16	2	F05 CL
40	HHCS, 5/16-18 X 1-1/4	6	F05 18 10 HH
41	FLAT WASHER, 5/16	22	F05 FW
42	HEX NUT, 5/16	16	F05 HN
43	AN WASHER, 5/16	10	F05 AN
44	RIDEPLATE BRACKET	1	I7301
45	RIDEPLATE	1	I6901
46	FHMS, 5/16-18 X 2	2	F05 18 16 FH
47	FHMS, 5/16-18 X 3/4	3	F05 18 06 FH
48	GRATE BACK-UP	1	I4307
49	GRATE	1	I4207
50	SHCS, 5/16-18 X 1-1/4	4	F05 18 10 SH
51	O-RING	1	O3601
52	SET SCREW, 10-32 X 3/8	6	F03 32 03 SS
53	STAR LOCK WASHER, 5/16	6	F05 SW

AMERICAN TURBINE

MODEL TJ-309 JET (W / B1007 BEARING)



AMERICAN TURBINE

MODEL TJ-309 JET (W / B1007 BEARING)

LEGEND

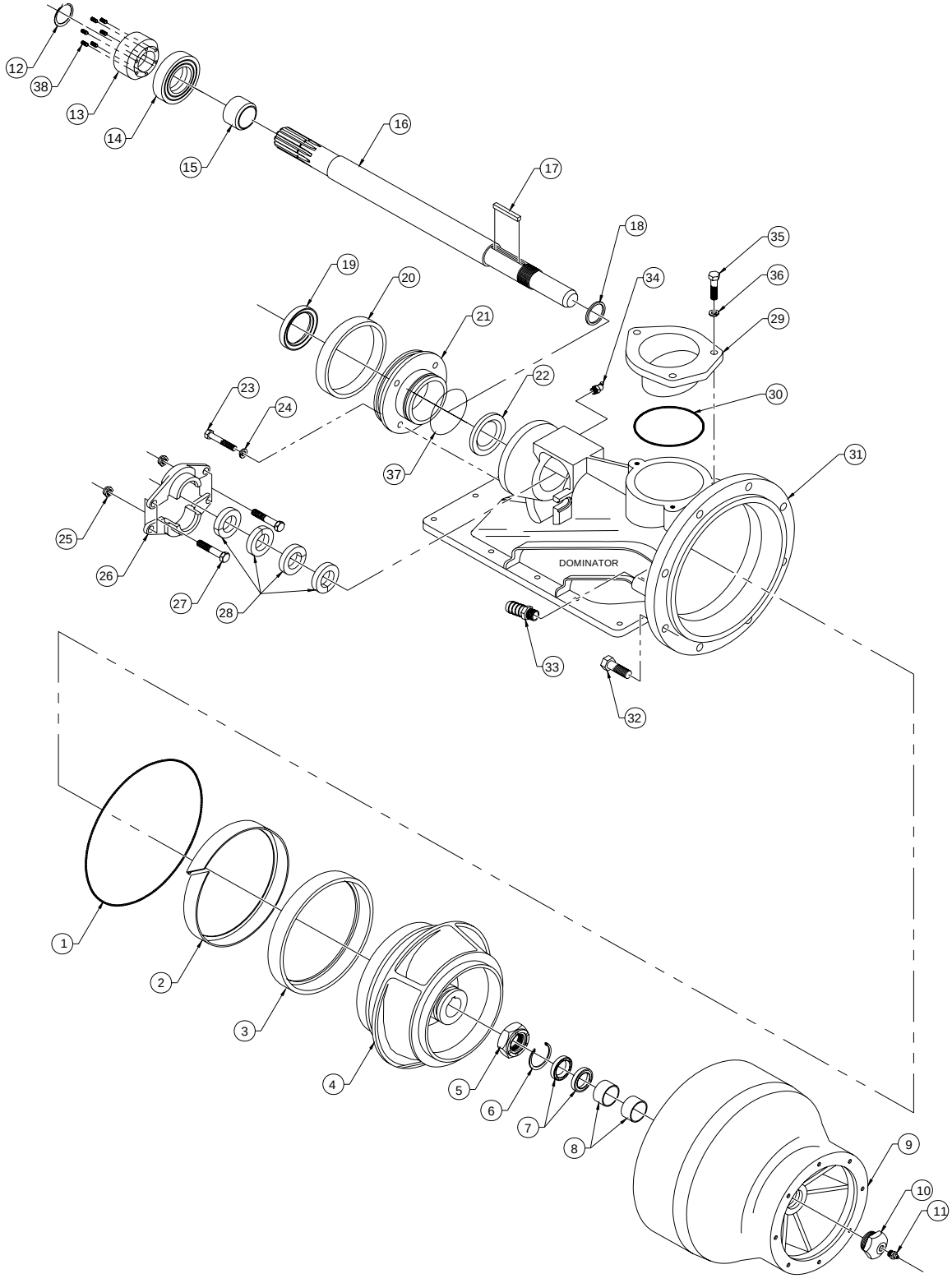
SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEAL	2	SL2003
8	BOWL BEARING	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	ZERT	1	SC8901
12	SNAP RING	1	SH1507
13	THRUST WASHER	1	SH2005
14	THRUST BEARING	1	B1007
15	SLINGER RING	1	SH2507
16	PUMP SHAFT	1	SH1007
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1007
20	ENGINE MOUNT RING	1	SC4007
21	BEARING CAP	1	SC2007
22	SUCTION SEAL	1	SL1507
23	HHCS, 5/16-18 X 2	14	F05 18 16 HH
24	LOCKWASHER, 5/16	20	F05 LW
25	LOCK NUT, 3/8-24 (THIN)	2	F06 24 TL
26	PACKING FOLLOWER (PAIR)	1	SC2507

SYM.	DESCRIPTION	QTY.	PART NO.
27	HHCS, 3/8-24 X 2	2	F06 24 16 HH
28	PACKING RINGS	4	SC3007
29	HAND HOLE COVER	1	SC1701
30	ORING	1	O1002
31	SUCTION PIECE	1	SC1403
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR, 3/8	1	SC4507
34	GREASE ZERT	1	SC8801
35	WINGNUT, 3/8-16	2	F06 16 WN
36	THICK WASHER, 3/8	2	F06 TW
37	COTTER PIN, 1/8 X 1/2	2	F02 04 CP
38	EYE BOLT, 3/8-16	2	F06 16 EB
39	CLEVIS PIN, 5/16	2	F05 CL
40	HHCS, 5/16-18 X 1-1/4	6	F05 18 10 HH
41	FLAT WASHER, 5/16	22	F05 FW
42	HEX NUT, 5/16-18	16	F05 18 HN
43	AN WASHER, 5/16	10	F05 AN
44	RIDEPLATE BRACKET	1	I7301
45	RIDEPLATE	1	I6901
46	FHMS, 5/16-18 X 2	2	F05 18 16 FH
47	FHMS, 5/16-18 X 3/4	3	F05 18 06 FH
48	GRATE BACK-UP	1	I4307
49	GRATE	1	I4207
50	SHCS, 5/16-18 X 1-1/4	4	F05 18 10 SH
51	STAR LOCK WASHER, 5/16	6	F05 SW

AMERICAN TURBINE

MODEL 12-S JET (W / HP BEARING)

USED W / SERIAL # 25649 - PRESENT



AMERICAN TURBINE

MODEL 12-S JET (W / HP BEARING)

USED W / SERIAL # 25649 - PRESENT

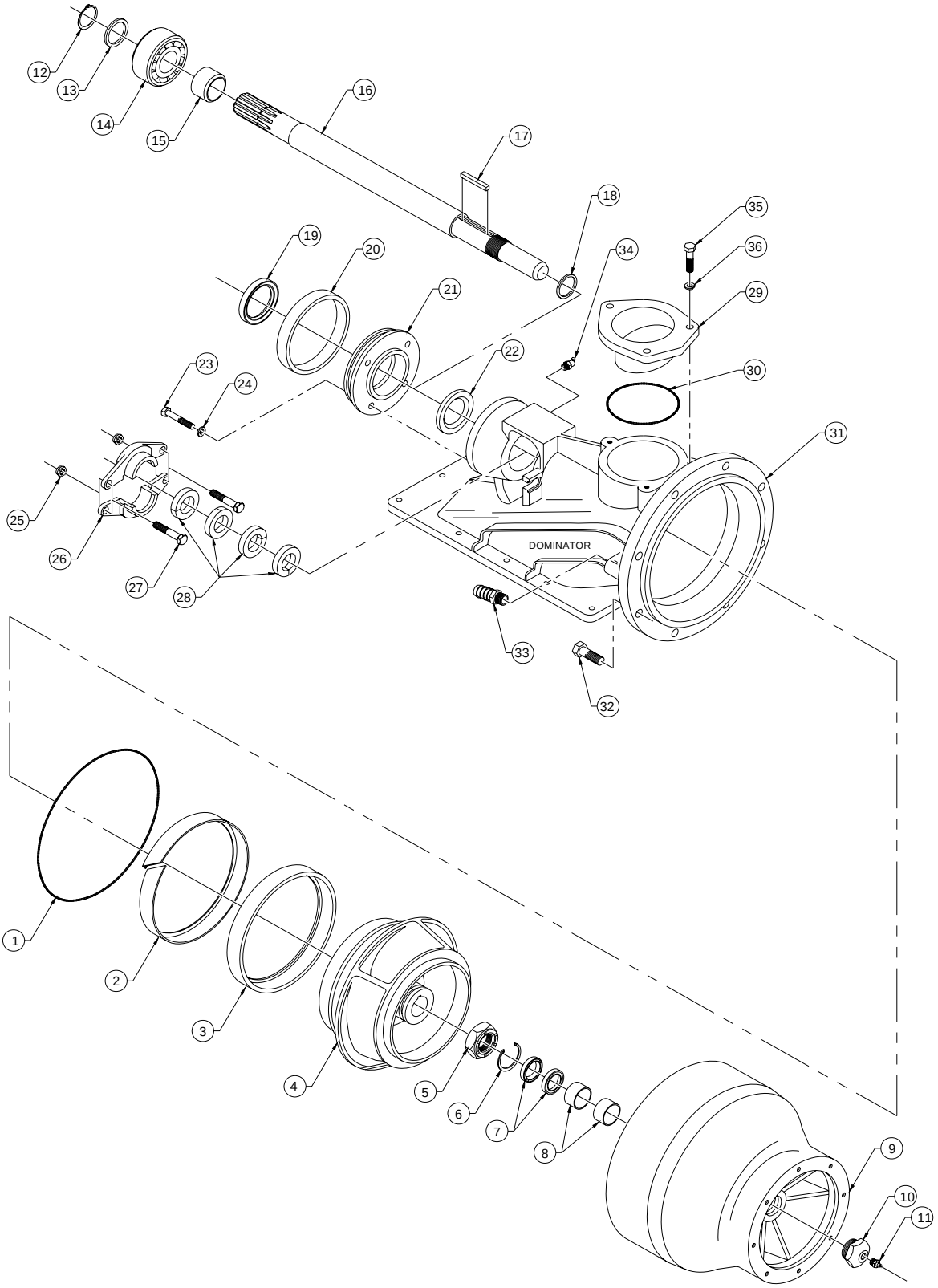
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEALS	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	GREASE ZERT	1	SC8901
12	SHAFT SNAP RING	1	SH1507
13	BEARING PRE-LOAD SEAL RING	1	SH5005
14	THRUST BEARING	1	B1107
15	SLINGER RING	1	SH2507
16	SHAFT	1	SH1007
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1001

SYM.	DESCRIPTION	QTY.	PART NO.
20	ENGINE MOUNT RING	1	SC4007
21	BEARING CAP	1	SC2107
22	SUCTION SEAL	1	SL1507
23	HHCS, 5/16-18 X 2	4	F05 18 16 HH
24	LOCKWASHER, 5/16	4	F05 LW
25	LOCK NUT, 3/8-24 (THIN)	2	F06 24 TL
26	PACKING FOLLOWER (PAIR)	1	SC2507
27	HHCS, 3/8-24 X 1 3/4	2	F06 24 14 HH
28	PACKING RINGS	4	SC3007
29	HAND HOLE COVER	1	SC1703
30	O-RING HAND HOLE COVER	1	O1003
31	SUCTION PIECE	1	SC1003
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR	1	SC4507
34	GREASE ZERT	1	SC8801
35	HHCS, 5/16-18 X 1-1/4	3	F05 18 10 HH
36	LOCKWASHER, 5/16	3	F05 LW
37	O-RING, BEARING CAP	1	O3601
38	SET SCREW, 10-32 X 3/8	6	F03 32 03 SS

AMERICAN TURBINE

MODEL 12-S JET (W / B1007 BEARING)



AMERICAN TURBINE

MODEL 12-S JET (W / B1007 BEARING)

LEGEND

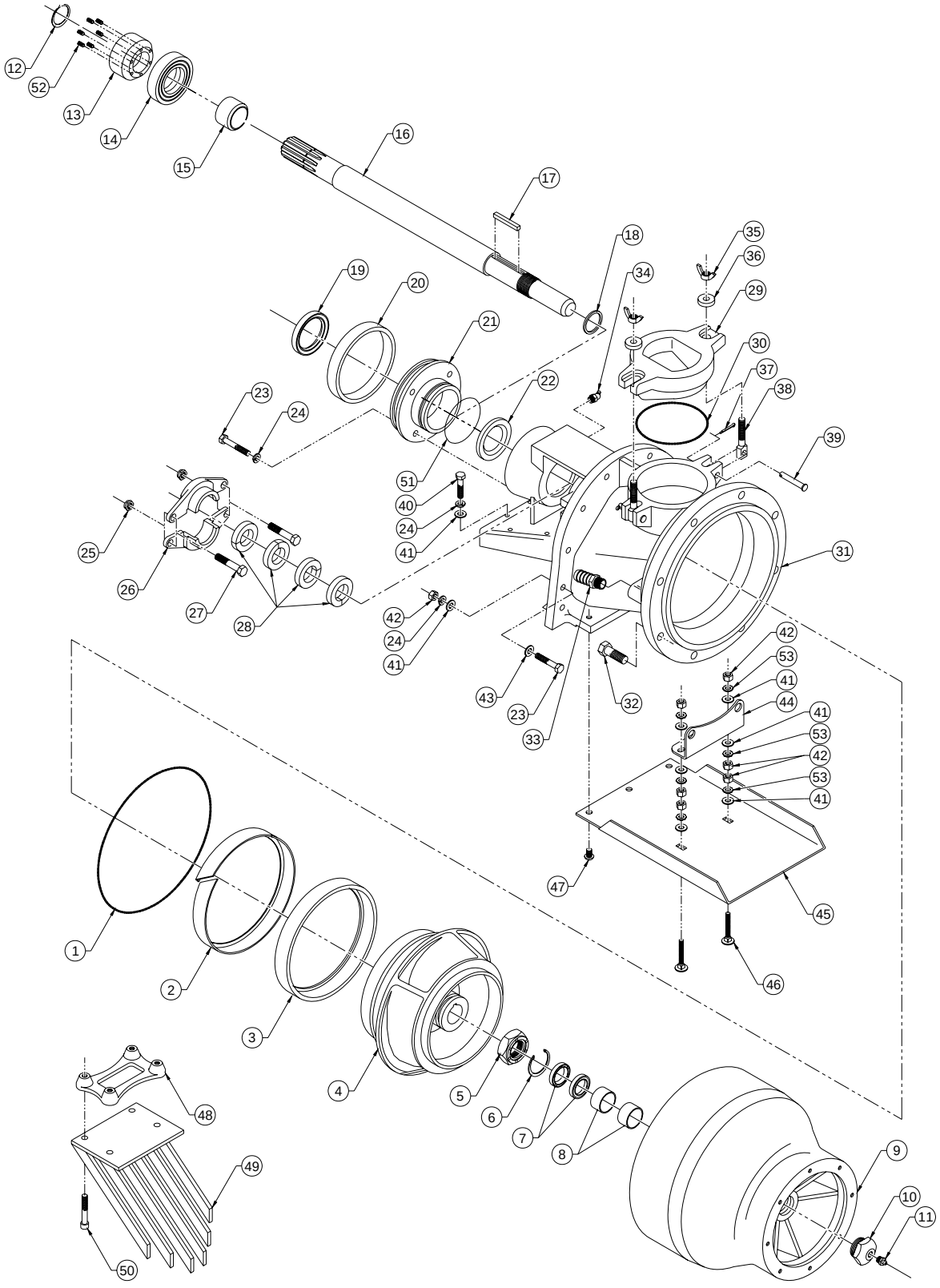
SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEALS	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	GREASE ZERT	1	SC8901
12	SHAFT SNAP RING	1	SH1507
13	THRUST WASHER	1	SH2005
14	THRUST BEARING	1	B1007
15	SLINGER RING	1	SH2507
16	SHAFT	1	SH1007
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007

SYM.	DESCRIPTION	QTY.	PART NO.
19	BEARING CAP SEAL	1	SL1007
20	ENGINE MOUNT RING	1	SC4007
21	BEARING CAP	1	SC2007
22	SUCTION SEAL	1	SL1507
23	HHCS, 5/16-18 X 2	4	F05 18 16 HH
24	LOCKWASHER, 5/16	4	F05 LW
25	LOCK NUT, 3/8-24 (THIN)	2	F06 24 LN
26	PACKING FOLLOWER (PAIR)	1	SC2507
27	HHCS, 3/8-24 X 1-3/4	2	F06 24 14 HH
28	PACKING RINGS	4	SC3007
29	HAND HOLE COVER	1	SC1703
30	O-RING HAND HOLE COVER	1	O1003
31	SUCTION PIECE	1	SC1003
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR, 3/8	1	SC4507
34	GREASE ZERT	1	SC8801
35	HHCS, 5/16-18 X 1-1/4	3	F05 18 10 HH
36	LOCKWASHER, 5/16	3	F05 LW

AMERICAN TURBINE

MODEL 12-TD JET (W / HP BEARING)

USED W / SERIAL # 25649 - PRESENT



AMERICAN TURBINE

MODEL 12-TD JET (W / HP BEARING)

USED W / SERIAL # 25649 - PRESENT

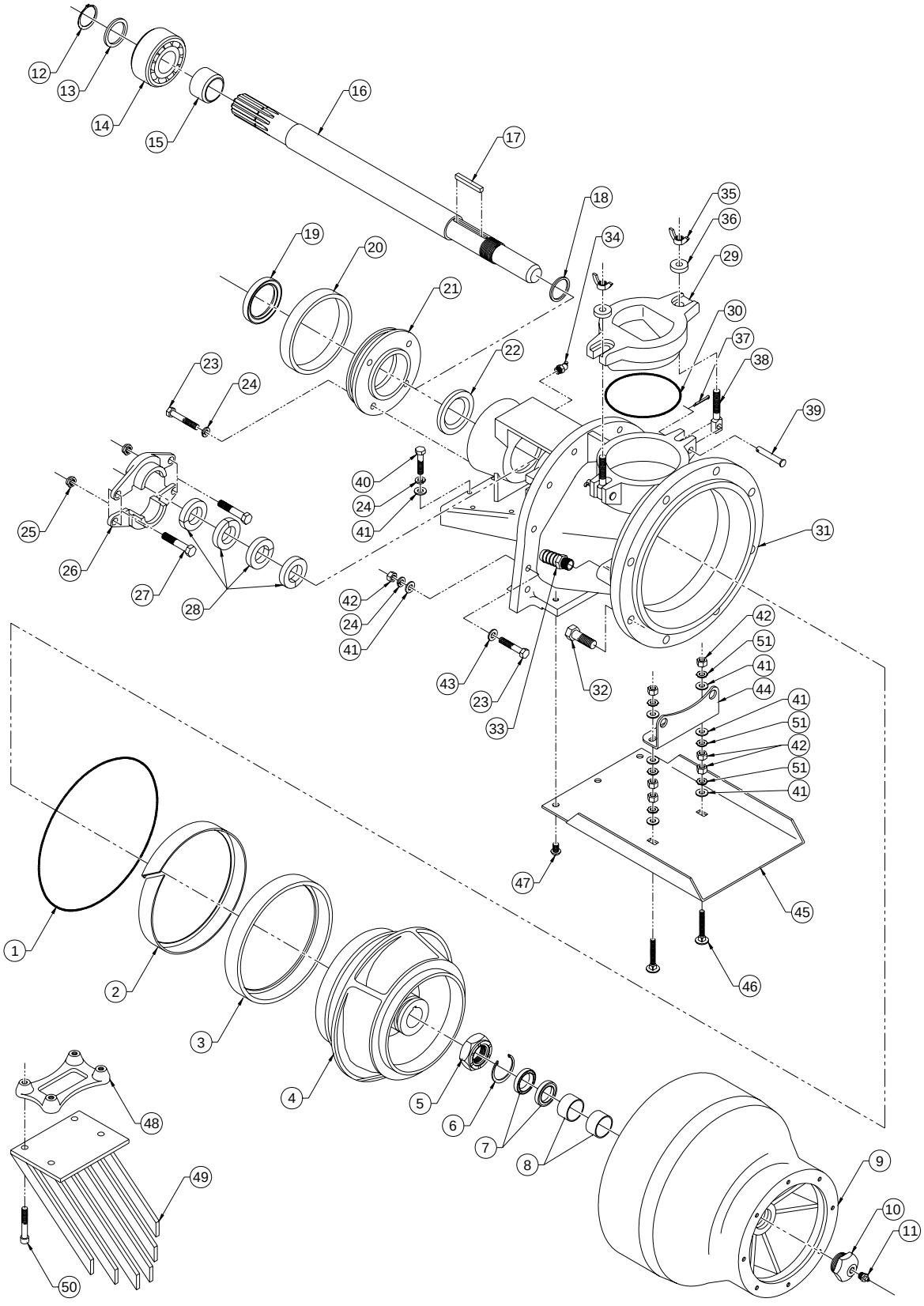
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEAL	2	SL2003
8	BOWL BEARING	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	ZERT	1	SC8901
12	SNAP RING	1	SH1507
13	BEARING PRE-LOAD SEAL RING	1	SH5005
14	THRUST BEARING	1	B1107
15	SLINGER RING	1	SH2507
16	PUMP SHAFT	1	SH1007
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1001
20	ENGINE MOUNT RING	1	SC4007
21	BEARING CAP	1	SC2107
22	SUCTION SEAL	1	SL1507
23	HHCS, 5/16-18 X 2	14	F05 18 16 HH
24	LOCKWASHER, 5/16	20	F05 LW
25	LOCK NUT, 3/8-24 (THIN)	2	F06 24 TL
26	PACKING FOLLOWER (PAIR)	1	SC2507
27	HHCS, 3/8-24 X 2	2	F06 24 16 HH

SYM.	DESCRIPTION	QTY.	PART NO.
28	PACKING RINGS	4	SC3007
29	HAND HOLE COVER	1	SC1701
30	O-RING	1	O1002
31	SUCTION PIECE	1	SC1403
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR, 3/8	1	SC4507
34	GREASE ZERT	1	SC8801
35	WINGNUT, 3/8-16	2	F06 16 WN
36	THICK WASHER, 3/8	2	F06 TW
37	COTTER PIN, 1/8 X 1/2	2	F02 04 CP
38	EYE BOLT, 3/8-16	2	F06 16 EB
39	CLEVIS PIN, 5/16	2	F05 CL
40	HHCS, 5/16-18 X 1-1/4	6	F05 18 10 HH
41	FLAT WASHER, 5/16	22	F05 FW
42	HEX NUT, 5/16-18	16	F05 18 HN
43	AN WASHER, 5/16	10	F05 AN
44	RIDEPLATE BRACKET	1	I7301
45	RIDEPLATE	1	I6901
46	FHMS, 5/16-18 X 2	2	F05 18 16 FH
47	FHMS, 5/16-18 X 3/4	3	F05 18 06 FH
48	GRATE BACK-UP	1	I4307
49	GRATE	1	I4207
50	SHCS, 5/16-18 X 1-1/4	4	F05 18 10 SH
51	O-RING	1	O3601
52	SET SCREW, 10-32 X 3/8	6	F03 32 03 SS
53	STAR LOCK WASHER, 5/16	6	F05 SW

AMERICAN TURBINE

MODEL 12-TD JET (W / B1007 BEARING)



AMERICAN TURBINE

MODEL 12-TD JET (W / B1007 BEARING)

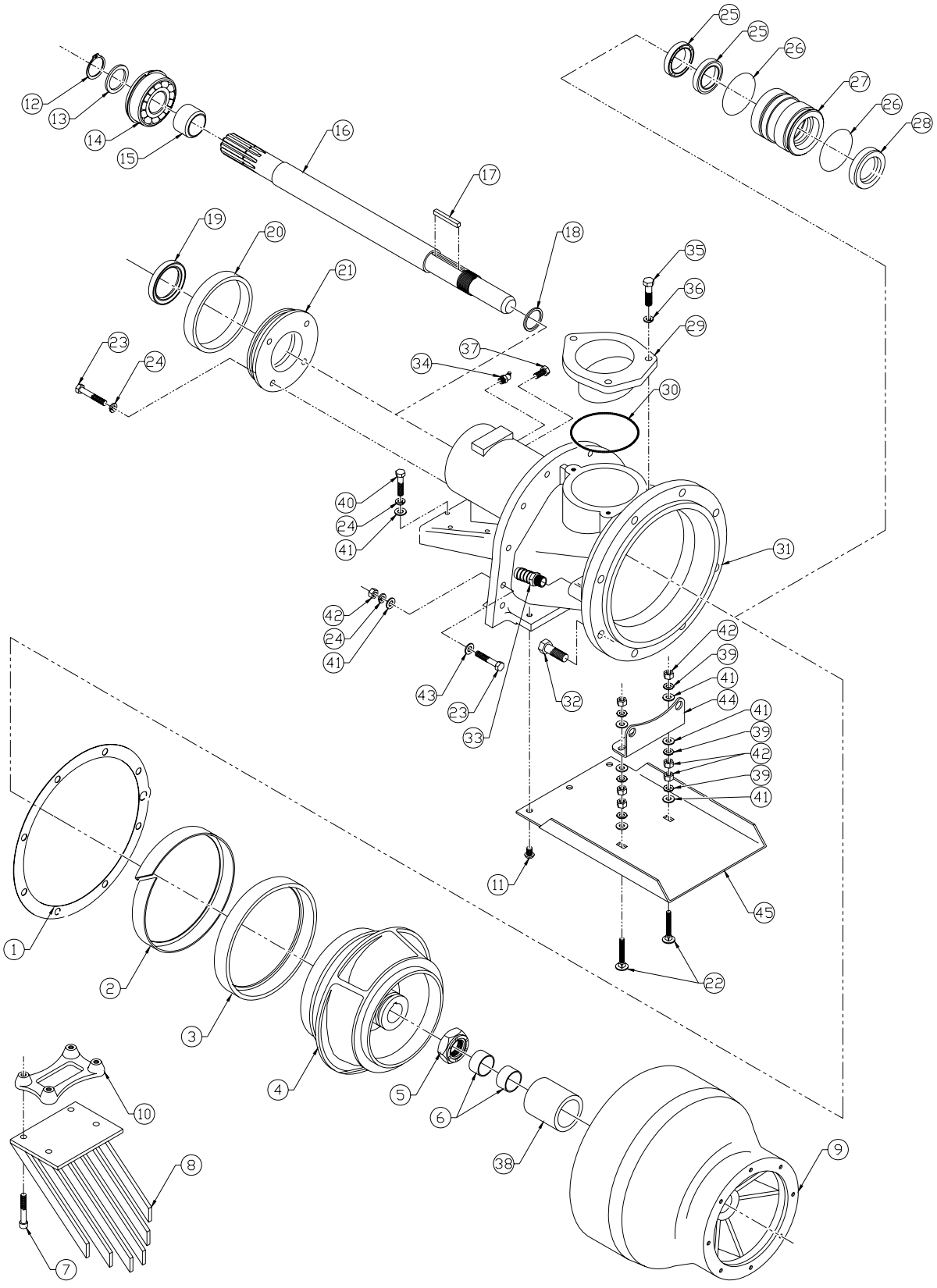
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEAL	2	SL2003
8	BOWL BEARING	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	ZERT	1	SC8901
12	SNAP RING	1	SH1507
13	THRUST WASHER	1	SH2005
14	THRUST BEARING	1	B1007
15	SLINGER RING	1	SH2507
16	PUMP SHAFT	1	SH1007
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1007
20	ENGINE MOUNT RING	1	SC4007
21	BEARING CAP	1	SC2007
22	SUCTION SEAL	1	SL1507
23	HHCS, 5/16-18 X 2	14	F05 18 16 HH
24	LOCKWASHER, 5/16	20	F05 LW
25	LOCK NUT, 3/8-24 (THIN)	2	F06 24 TL
26	PACKING FOLLOWER (PAIR)	1	SC2507

SYM.	DESCRIPTION	QTY.	PART NO.
27	HHCS, 3/8-24 X 2	2	F06 24 16 HH
28	PACKING RINGS	4	SC3007
29	HAND HOLE COVER	1	SC1701
30	O-RING	1	O1002
31	SUCTION PIECE	1	SC1403
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR, 3/8	1	SC4507
34	GREASE ZERT	1	SC8801
35	WINGNUT, 3/8-16	2	F06 16 WN
36	THICK WASHER, 3/8	2	F06 TW
37	COTTER PIN, 1/8 X 1/2	2	F02 04 CP
38	EYE BOLT, 3/8-16	2	F06 16 EB
39	CLEVIS PIN, 5/16	2	F05 CL
40	HHCS, 5/16-18 X 1-1/4	6	F05 18 10 HH
41	FLAT WASHER, 5/16	22	F05 FW
42	HEX NUT, 5/16-18	16	F05 18 HN
43	AN WASHER, 5/16	10	F05 AN
44	RIDEPLATE BRACKET	1	I7301
45	RIDEPLATE	1	I6901
46	FHMS, 5/16-18 X 2	2	F05 18 16 FH
47	FHMS, 5/16-18 X 3/4	3	F05 18 06 FH
48	GRATE BACK-UP	1	I4307
49	GRATE	1	I4207
50	SHCS, 5/16-18 X 1-1/4	4	F05 18 10 SH
51	STAR LOCK WASHER, 5/16	6	F05 SW

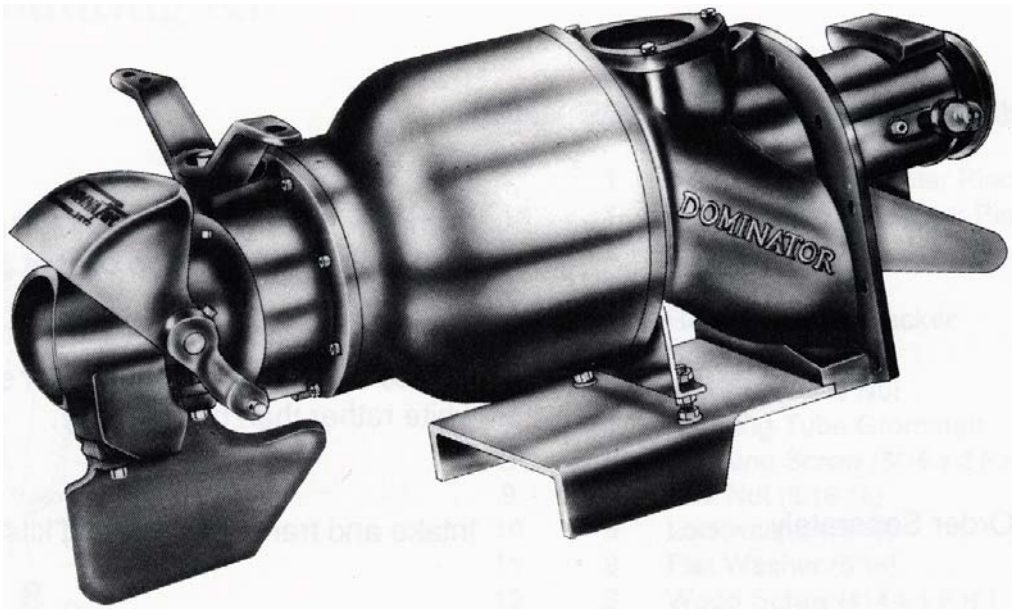
AMERICAN TURBINE

MODEL 12-TD JET (W / SEAL PAK)



AMERICAN TURBINE

MODEL 12-TD JET (W / SEAL PAK)



LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL GASKET	1	G2006
2	WEAR RING LINER	1	WR6004
3	WEAR RING (SEE BELOW)	1	WR5***
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL BEARING	2	B1505
7	SHCS, 5/16-18 X 1-1/4	4	F05 18 10 SH
8	GRATE	1	I4207
9	BOWL	1	SC9103
10	GRATE BACK-UP	1	I4307
11	FHMS, 5/16-18 X 3/4	3	F05 18 06 FH
12	SNAP RING	1	SH1507
13	THRUST WASHER	1	SH2005
14	THRUST BEARING	1	B1103
15	SLINGER RING	1	SH2403
16	PUMP SHAFT	1	SH1107
17	IMPELLER KEY	1	SH3007
18	SHIM KIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1007
20	ENGINE MOUNT RING	1	SC4007
21	BEARING CAP	1	SC2003
22	FHMS, 5/16-18 X 2	2	F05 18 16 FH
23	HHCS, 5/16-18 X 2	14	F05 18 16 HH

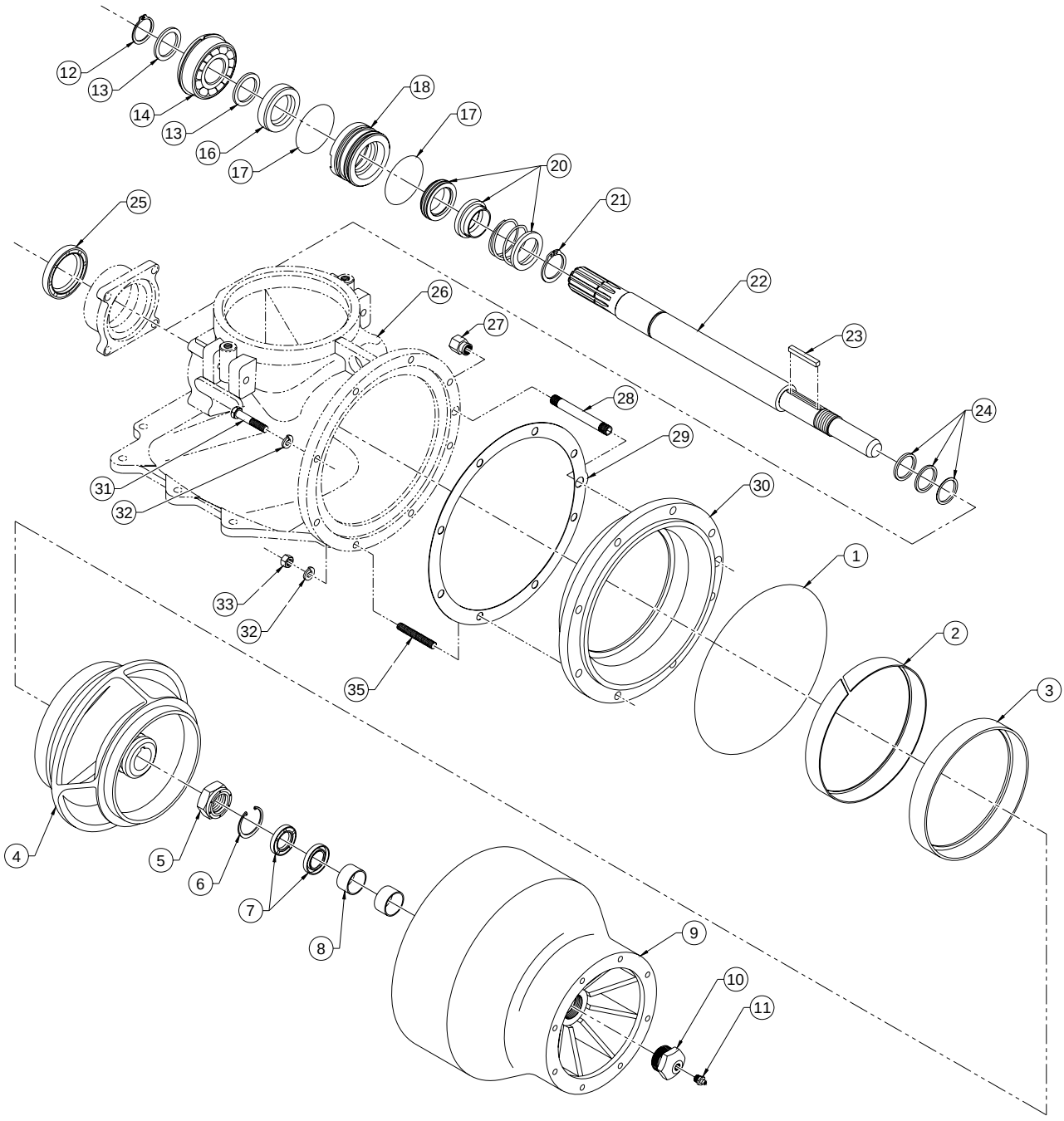
SYM.	DESCRIPTION	QTY.	PART NO.
24	LOCKWASHER, 5/16	20	F05 LW
25	SUCTION SEAL	2	SL1603
26	SEAL PAK O-RING	2	O2103
27	SEAL PAK HOUSING	1	SH2303
28	SEAL PAK SEAL	1	SL3508
29	HAND HOLE COVER	1	SC1703
30	HAND HOLE COVER O-RING	1	O1003
31	SUCTION PIECE	1	****
32	HHCS, 1/2-13 X 1-1/2	8	F08 13 12 HH
33	BARBED CONNECTOR, 3/8	1	SC4507
34	GREASE ZERT	1	SC8801
35	HHCS, 5/16-18 X 1-1/4	3	F05 18 10 HH
36	LOCKWASHER, 5/16	3	F05 LW
37	HHCS, 3/8-16 X 3/4	1	F06 16 06 HH
38	BOWL BEARING, WATER LUBE	1	B1603
39	STAR WASHER, 5/16	6	F05 SW
40	HHCS, 5/16-18 X 1-1/4	6	F05 18 10 HH
41	FLAT WASHER, 5/16	22	F05 FW
42	HEX NUT, 5/16-18	16	F05 18 HN
43	AN WASHER, 5/16	10	F05 AN
44	RIDEPLATE BRACKET	1	I7301
45	RIDEPLATE	1	I6901

WEAR RING PART # WR5800 FOR SERIAL # UP TO 14400
WEAR RING PART # WR5000 AFTER SERIAL # 14400

AMERICAN TURBINE

JACUZZI YJ ENERGIZER KIT

PART # JK2208



AMERICAN TURBINE

JACUZZI YJ ENERGIZER KIT

PART # JK2208

LEGEND

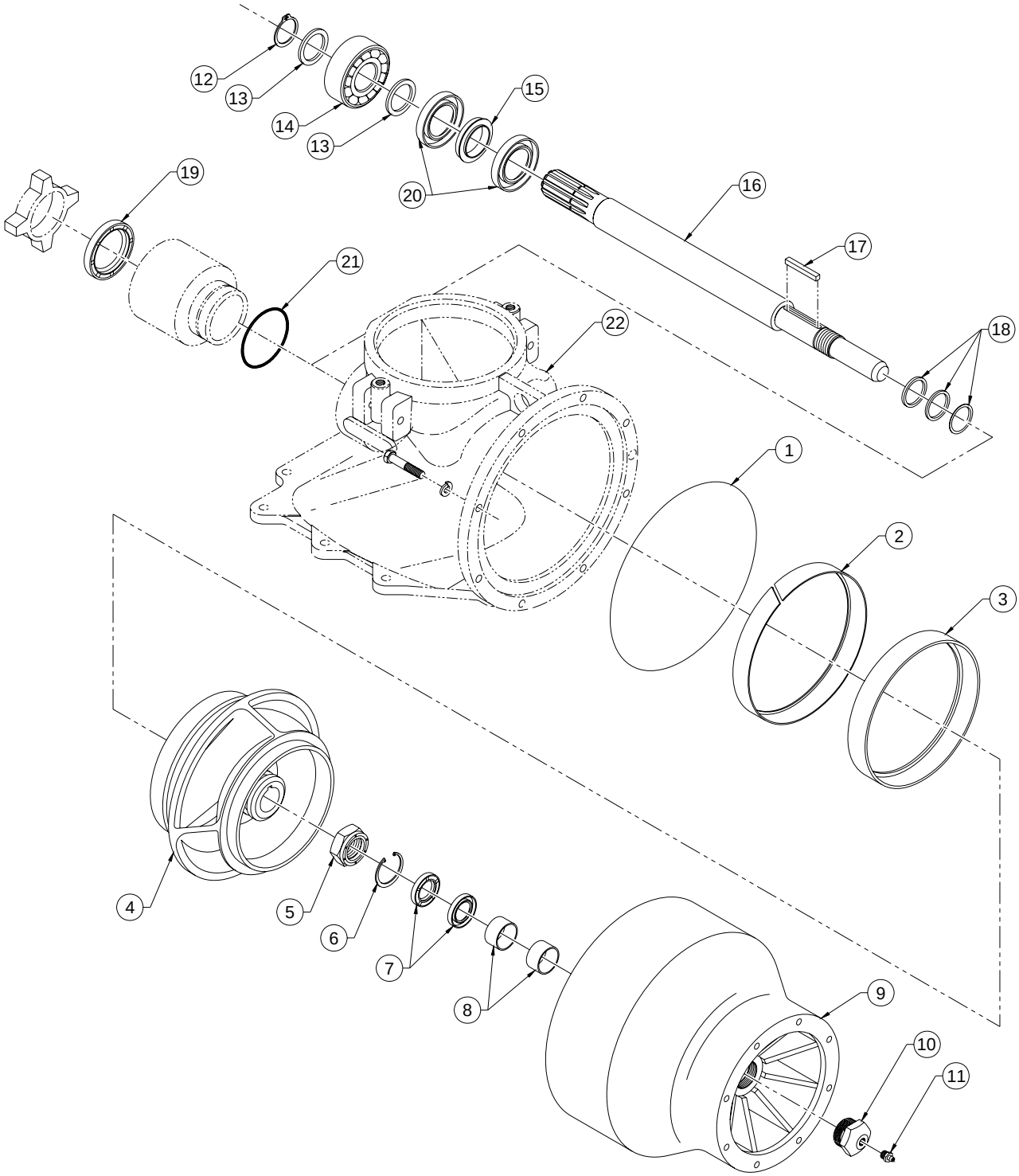
SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5800
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEAL	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9108
10	BOWL PLUG	1	SC9001
11	BOWL PLUG ZERT	1	SC8901
12	SHAFT SNAP RING	1	SH1507
13	THRUST WASHER	2	SH2005
14	THRUST BEARING	1	B1103
16	SEAL PAC SEAL	1	SL3508
17	SEAL PAC O-RING	2	O3108

SYM.	DESCRIPTION	QTY.	PART NO.
18	SEAL PAC	1	SH2208
20	MECHANICAL SEAL	1	SL4008
21	SNAP RING MECH SEAL	1	SH1608
22	PUMP SHAFT	1	SH1008
23	IMPELLER KEY	1	SH3007
24	SHIM KIT	1	SHK4007
25	BEARING CAP SEAL	1	SL1007
26	12YJ SUCTION	1	****
27	BRASS NIPPLE ADAPTOR	1	SC6208
28	BRASS NIPPLE	1	SC6108
29	GASKET	1	G4508
30	SUCTION PIECE ADAPTOR	1	SC6008
31	HHCS, 3/8-16 X 2	6	F06 16 16 HH
32	LOCKWASHER, 3/8	8	F06 LW
33	HEX NUT, 3/8-16	2	F06 16 HN
35	SET SCREW, 3/8-16 2-1/2	2	F06 16 20 SS

AMERICAN TURBINE

JACUZZI WJ ENERGIZER KIT

PART # JK2108



AMERICAN TURBINE

JACUZZI WJ ENERGIZER KIT

PART # JK2108

LEGEND

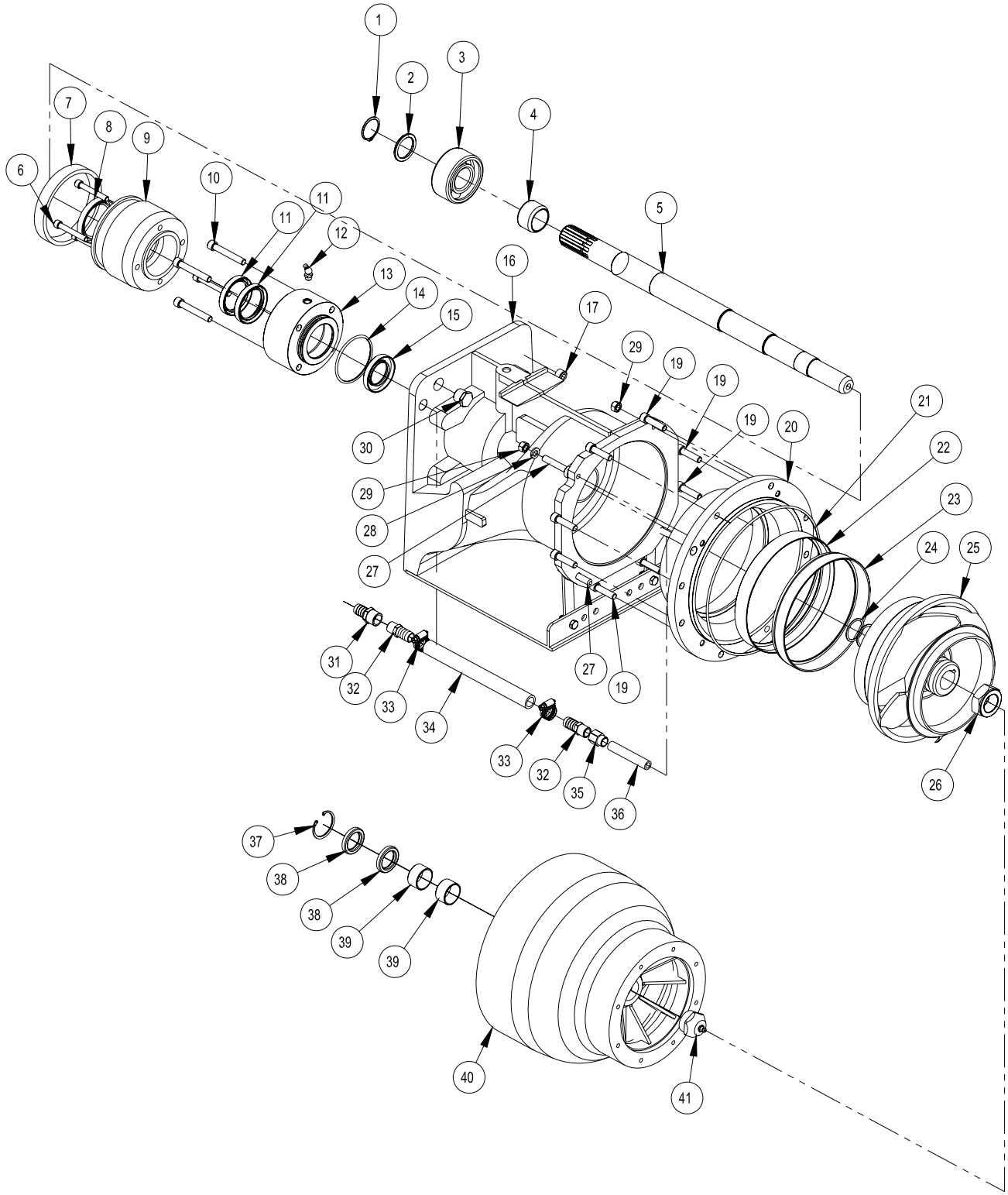
SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5900
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEAL	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	BOWL PLUG ZERT	1	SC8901

SYM.	DESCRIPTION	QTY.	PART NO.
12	SHAFT SNAP RING	1	SH1507
13	THRUST WASHER	2	SH2005
14	THRUST BEARING	1	B1007
15	SPACER, LIP SEAL	1	SH2108
16	PUMP SHAFT	1	SH1108
17	IMPELLER KEY	1	SH3007
18	SHIMKIT	1	SHK4007
19	BEARING CAP SEAL	1	SL1107
20	SEAL, LIP SEAL	2	SL3708
21	O-RING, BEARING HOUSING	1	O3108
22	12WJ SUCTION	1	****

AMERICAN TURBINE

PANTHER ENERGIZER KIT

PART # PK1001



AMERICAN TURBINE

PANTHER ENERGIZER KIT

PART # PK1001

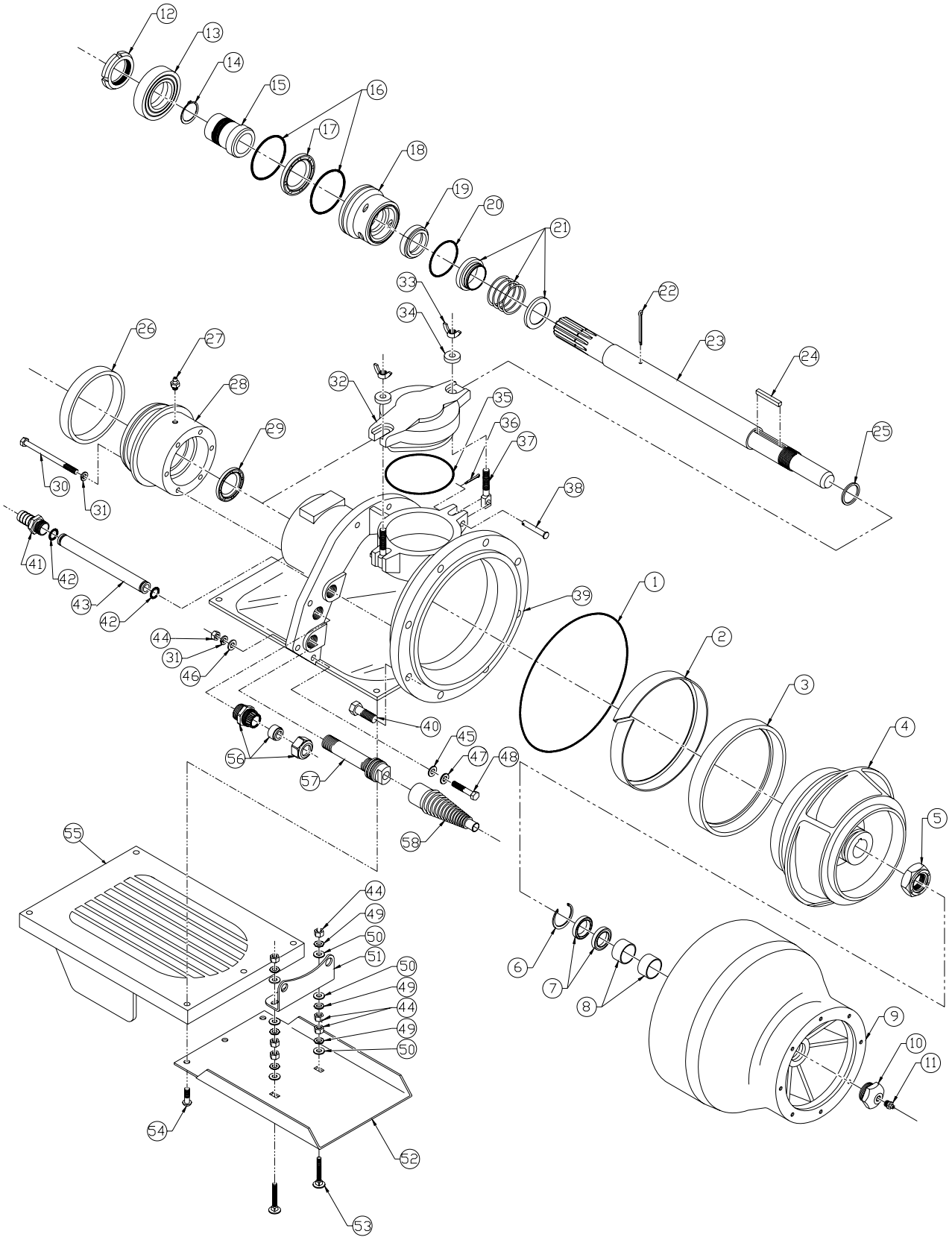
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	SNAP RING	1	SH1507
2	THRUST WASHER	1	SH2005
3	THRUST BEARING	1	B1007
4	SLINGER RING	1	SH2403
5	SHAFT	1	SH1107
6	5/16-18 X 2-1/4 SHCS	4	F05 18 18 SH
7	ENGINE MOUNT RING	1	SC4007
8	BEARING CAP SEAL	1	SL1007
9	BEARING CAP	1	SC2209
10	3/8-16 X 2-1/2 SHCS	4	F06 16 20 SH
11	BEARING HOUSING SEAL	2	SL1603
12	45 DEG. GREASE FITTING	1	SC8801
13	BEARING HOUSING	1	SC2109
14	BEARING HOUSING O-RING	1	O3108
15	SUCTION SEAL	1	SL1609
16	SUCTION	1	N / A
17	5/8-18 X 3/4 SLOTTED SS	1	F10 18 06 SS
19	3/8-16 X 1-1/2 SHCS	8	F06 16 12 SH
20	SUCTION PIECE ADAPTER	1	SC6009
21	BOWL O-RING	1	O3101

SYM.	DESCRIPTION	QTY.	PART NO.
22	WEAR RING LINER	1	WR6004
23	WEAR RING	1	WR5800
24	IMPELLER SHIMS	1	SHK4007
25	IMPELLER	1	IMA***
26	IMPELLER NUT	1	SH3507
27	3/8-16 X 2 SET SCREW	4	F06 16 16 SS
28	3/8 LOCKWASHER	4	F06 LW
29	3/8-16 LOCK NUT	4	F06 16 HN
30	BRASS HEX PLUG	1	SC6309
31	HOSE BARB	1	SC6109
32	BARBED CONNECTOR (3/8)	2	SC4507
33	HOSE CLAMP	2	M4501
34	COOLING HOSE	1	SC6209
35	WATER ADPT FITTING	1	SC6208
36	BRASS NIPPLE (1/4 X 3)	1	SC6108
37	BOWL SNAP RING	1	SC9201
38	BOWL SEAL	2	SL2003
39	BOWL BEARING	2	B1502
40	BOWL	1	SC9501
41	BOWL PLUG	1	SCA9001

AMERICAN TURBINE

MODEL FW-309 JET



AMERICAN TURBINE

MODEL FW-309 JET

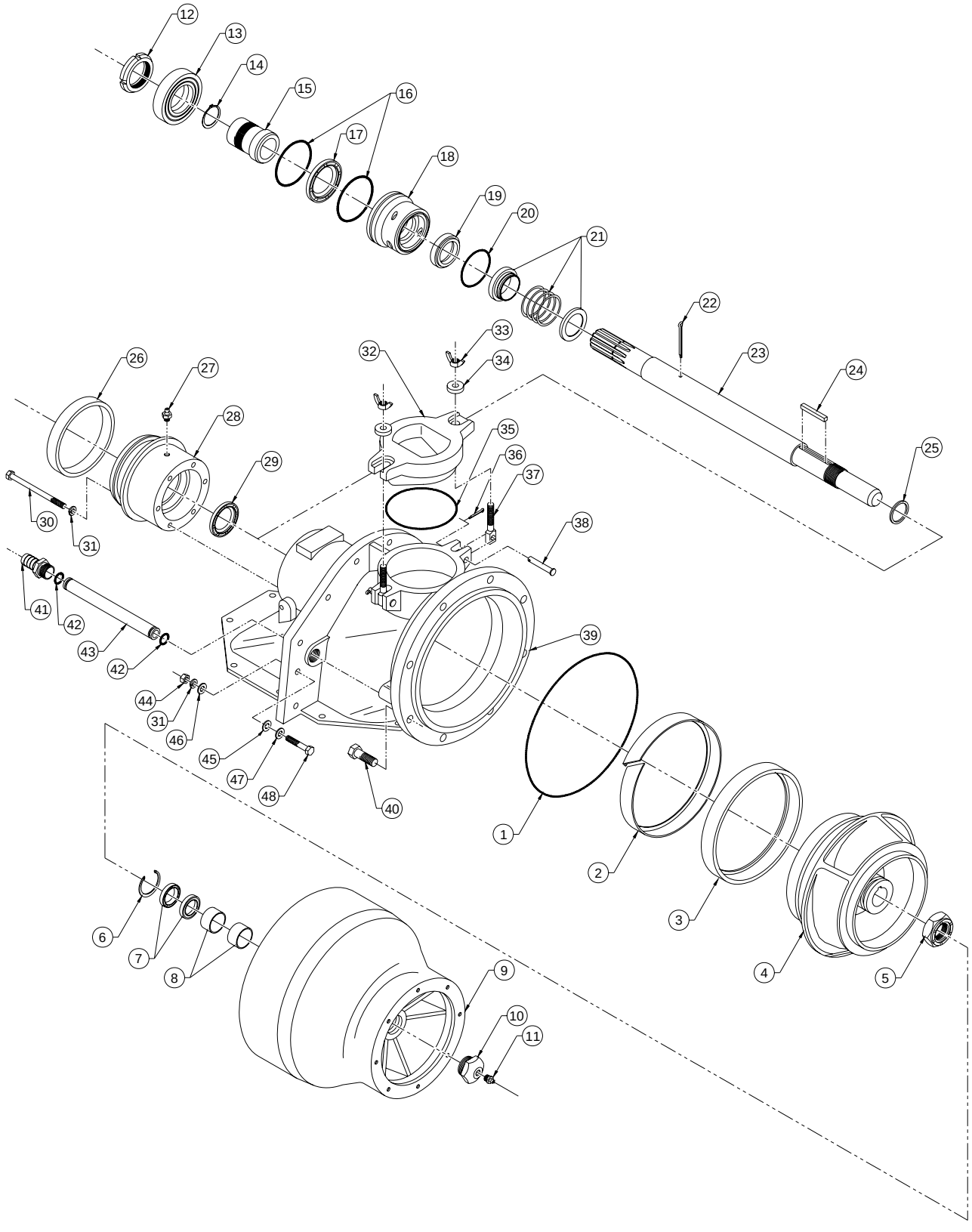
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEALS	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	GREASE ZERT	1	SC8901
12	BEARING SLEEVE NUT	1	SH5101
13	BEARING	1	B1101
14	SNAP RING	1	SH1507
15	BEARING SLEEVE	1	SH5001
16	O-RING BEARING HOUSING	2	O3301
17	SEAL FACE HOUSING SEAL	1	SL1201
18	SEAL FACE HOUSING	1	SH5201
19	CERAMIC SEAL	1	SL4008
20	O-RING SEAL FACE HOUSING	1	O3401
21	MECHANICAL SEAL	1	SL4008
22	COTTER PIN, 5/32 X 2	1	F03 16 CP
23	SD SHAFT	1	SH1207
24	IMPELLER KEY	1	SH3007
25	SHIM KIT	1	SHK4007
26	ENGINE MOUNT RING	1	SC4007
27	GREASE ZERT	1	SC8901
28	BEARING HOUSING	1	SC2101
29	BEARING HOUSING SEAL	1	SL1101

SYM.	DESCRIPTION	QTY.	PART NO.
30	HHCS, 5/16-18 X 4-1/2	6	F05 18 36 HH
31	LOCKWASHER, 5/16	16	F05 LW
32	HAND HOLE COVER	1	SC1701
33	WING NUT, 3/8-16	2	F06 16 WN
34	THICK WASHER, 3/8	2	F06 TW
35	HAND HOLE COVER O-RING	1	O1002
36	COTTER PIN, 1/8 X 1/2	2	F02 04 CP
37	EYE BOLT, 3/8-16	2	F06 16 EB
38	CLEVIS PIN, 5/16	2	F05 CL
39	SUCTION PIECE	1	SC1201
40	HHCS, 1/2-13 1-1/2	8	F08 13 12 HH
41	BARBED CONNECTOR, 3/4	1	SC4601
42	COOLING TUBE ORING	2	O3201
43	WATER TUBE	1	SC4501
44	HEX NUT, 5/16-18	16	F05 18 HN
45	BOLT INSULATOR, 5/16	10	F05 BI
46	NEOBOND WASHER, 5/16	10	F05 NW
47	AN WASHER, 5/16	10	F05 AN
48	HHCS, 5/16-18 X 1-1/2	10	F05 18 12 HH
49	STAR WASHER, 5/16	6	F05 SW
50	FLAT WASHER, 5/16	6	F05 FW
51	RIDEPLATE BRACKET	1	I7201
52	RIDEPLATE	1	I6701
53	CARRIAGE BOLT, 5/16-18 X 2	2	F05 18 16 CB
54	BUTTON SOCKET HEAD, 5/16-18 X 1-3/4	3	F05 18 14 BH
55	INTAKE GRATE	1	I8001
56	REVERSE CABLE PACKER, 1/2 NPT	1	T2201
57	STEERING CABLE ADAPTER	1	R5401
58	RUBBER BELLOWS	1	M4007

AMERICAN TURBINE

MODEL SD-309 JET



AMERICAN TURBINE

MODEL SD-309 JET

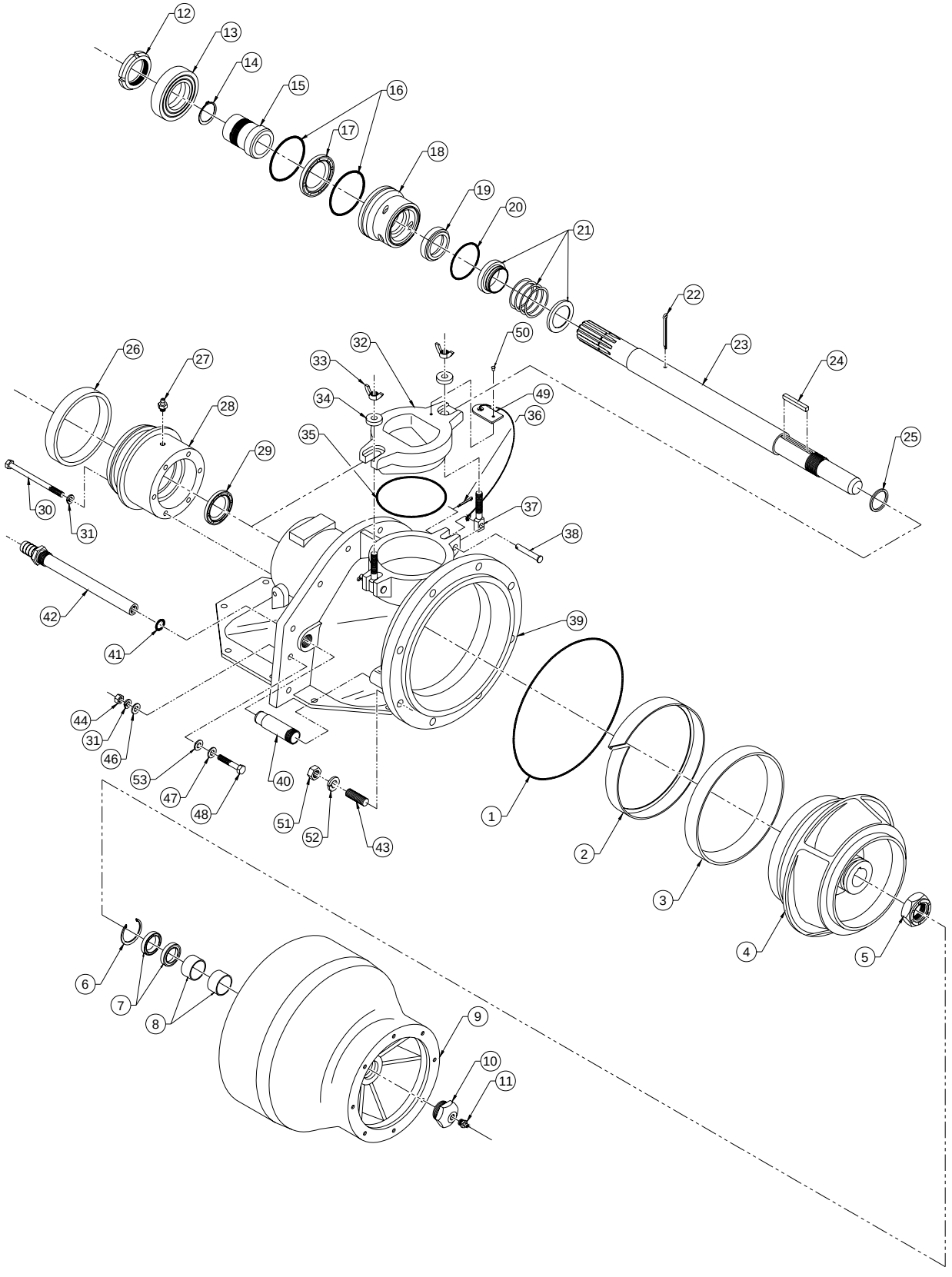
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O3101
2	WEAR RING LINER	1	WR6004
3	WEAR RING	1	WR5000
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEALS	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9301
10	BOWL PLUG	1	SC9001
11	GREASE ZERT	1	SC8901
12	BEARING SLEEVE NUT	1	SH5101
13	BEARING	1	B1101
14	SNAP RING	1	SH1507
15	BEARING SLEEVE	1	SH5001
16	O-RING BEARING HOUSING	2	O3301
17	SEAL FACE HOUSING SEAL	1	SL1201
18	SEAL FACE HOUSING	1	SH5201
19	CERAMIC SEAL	1	SL4008
20	O-RING SEAL FACE HOUSING	1	O3401
21	MECHANICAL SEAL	1	SL4008
22	COTTER PIN, 5/32 X 2	1	F03 16 CP
23	SD SHAFT	1	SH1207
24	IMPELLER KEY	1	SH3007

SYM.	DESCRIPTION	QTY.	PART NO.
25	SHIM KIT	1	SHK4007
26	ENGINE MOUNT RING	1	SC4007
27	GREASE ZERT	1	SC8901
28	BEARING HOUSING	1	SC2101
29	BEARING HOUSING SEAL	1	SL1101
30	HHCS, 5/16-18 X 4-1/2	6	F05 18 36 HH
31	LOCKWASHER, 5/16	16	F05 LW
32	HAND HOLE COVER	1	SC1701
33	WING NUT, 3/8-16	2	F06 16 WN
34	THICK WASHER, 3/8	2	F06 TW
35	HAND HOLE COVER O-RING	1	O1002
36	COTTER PIN, 1/8 X 1/2	2	F02 04 CP
37	EYE BOLT, 3/8-16	2	F06 16 EB
38	CLEVIS PIN, 5/16	2	F05 CL
39	SUCTION PIECE	1	SC1301
40	HHCS, 1/2-13 1-1/2	8	F08 13 12 HH
41	BARBED CONNECTOR, 3/4	1	SC4607
42	COOLING TUBE ORING	2	O3201
43	WATER TUBE	1	SC4401
44	HEX NUT, 5/16-18	10	F05 18 HN
45	BOLT INSULATOR, 5/16	10	F05 BI
46	NEOBOND WASHER, 5/16	10	F05 NW
47	AN WASHER, 5/16	10	F05 AN
48	HHCS, 5/16-18 X 1-1/2	10	F05 18 12 HH

AMERICAN TURBINE

MODEL SD-312 JET



AMERICAN TURBINE

MODEL SD-312 JET

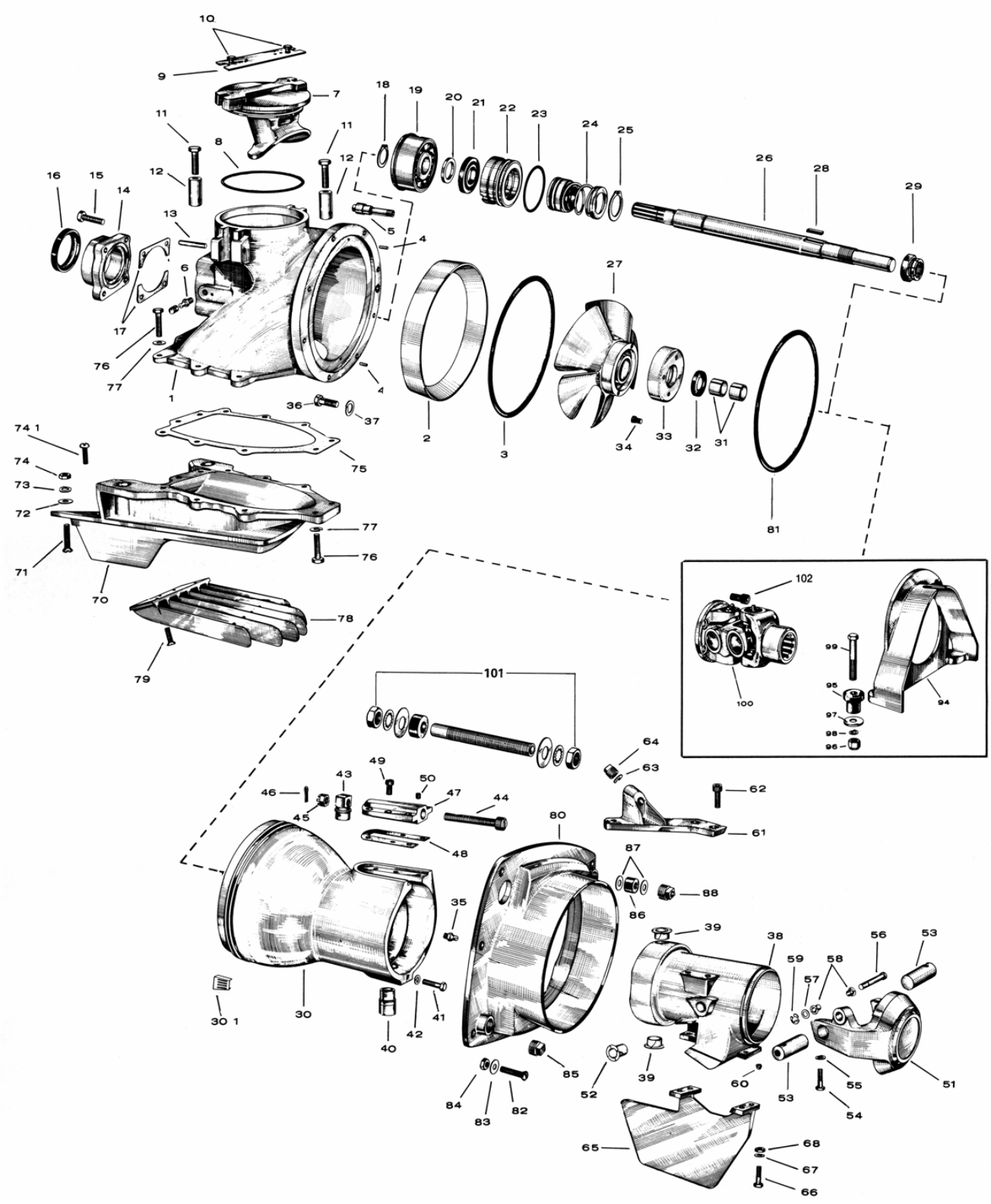
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	BOWL O-RING	1	O4001
2	WEAR RING LINER	1	WR6005
3	WEAR RING	1	WR5100
4	IMPELLER	1	IMA***
5	IMPELLER NUT	1	SH3507
6	BOWL SNAP RING	1	SC9201
7	BOWL SEALS	2	SL2003
8	BOWL BEARINGS	2	B1502
9	BOWL	1	SC9401
10	BOWL PLUG	1	SC9001
11	GREASE ZERT	1	SC8901
12	BEARING SLEEVE NUT	1	SH5101
13	BEARING	1	B1101
14	SNAP RING	1	SH1507
15	BEARING SLEEVE	1	SH5001
16	O-RING BEARING HOUSING	2	O3301
17	SEAL FACE HOUSING SEAL	1	SL1201
18	SEAL FACE HOUSING	1	SH5201
19	CERAMIC SEAL	1	SL4008
20	O-RING SEAL FACE HOUSING	1	O3401
21	MECHANICAL SEAL	1	SL4008
22	COTTER PIN, 5/32 X 2	1	F03 16 CP
23	SD SHAFT	1	SH1207
24	IMPELLER KEY	1	SH3007
25	SHIM KIT	1	SHK4007
26	ENGINE MOUNT RING	1	SC4007

SYM.	DESCRIPTION	QTY.	PART NO.
27	GREASE ZERT	1	SC8901
28	BEARING HOUSING	1	SC2101
29	BEARING HOUSING SEAL	1	SL1101
30	HHCS, 5/16-18 X 4-1/2	6	F05 18 36 HH
31	LOCKWASHER, 5/16	16	F05 LW
32	HAND HOLE COVER	1	SC1801
33	WING NUT, 3/8-16	2	F06 16 WN
34	THICK WASHER, 3/8	2	F06 TW
35	HAND HOLE COVER O-RING	1	O1002
36	COTTER PIN, 1/8 X 1/2	2	F02 04 CP
37	EYE BOLT, 3/8-16	2	F06 16 EB
38	CLEVIS PIN, 5/16	2	F05 CL
39	SUCTION PIECE	1	SC1401
40	WATER NIPPLE	1	SC4101
41	COOLING TUBE O-RING	1	O3801
42	H2O COOLING NIPPLE	1	SC4201
43	SET SCREW, 3/8-16 X 2	8	F06 16 16 SS
44	HEX NUT, 5/16-18	10	F05 18 HN
46	NEOBOND WASHER, 5/16	10	F05 NW
47	AN WASHER, 5/16	10	F05 AN
48	HHCS, 5/16-18 X 1-1/2	10	F05 18 12 HH
49	LANYARD	1	SC5201
50	DRIVE SCREW	1	SC5301
51	HEX NUT, 3/8-16	8	F06 16 HN
52	LOCKWASHER, 3/8	8	F06 LW
53	BOLT INSULATOR, 5/16	10	F05 BI

AMERICAN TURBINE

OEM JACUZZI 12YJ



AMERICAN TURBINE

OEM JACUZZI 12YJ

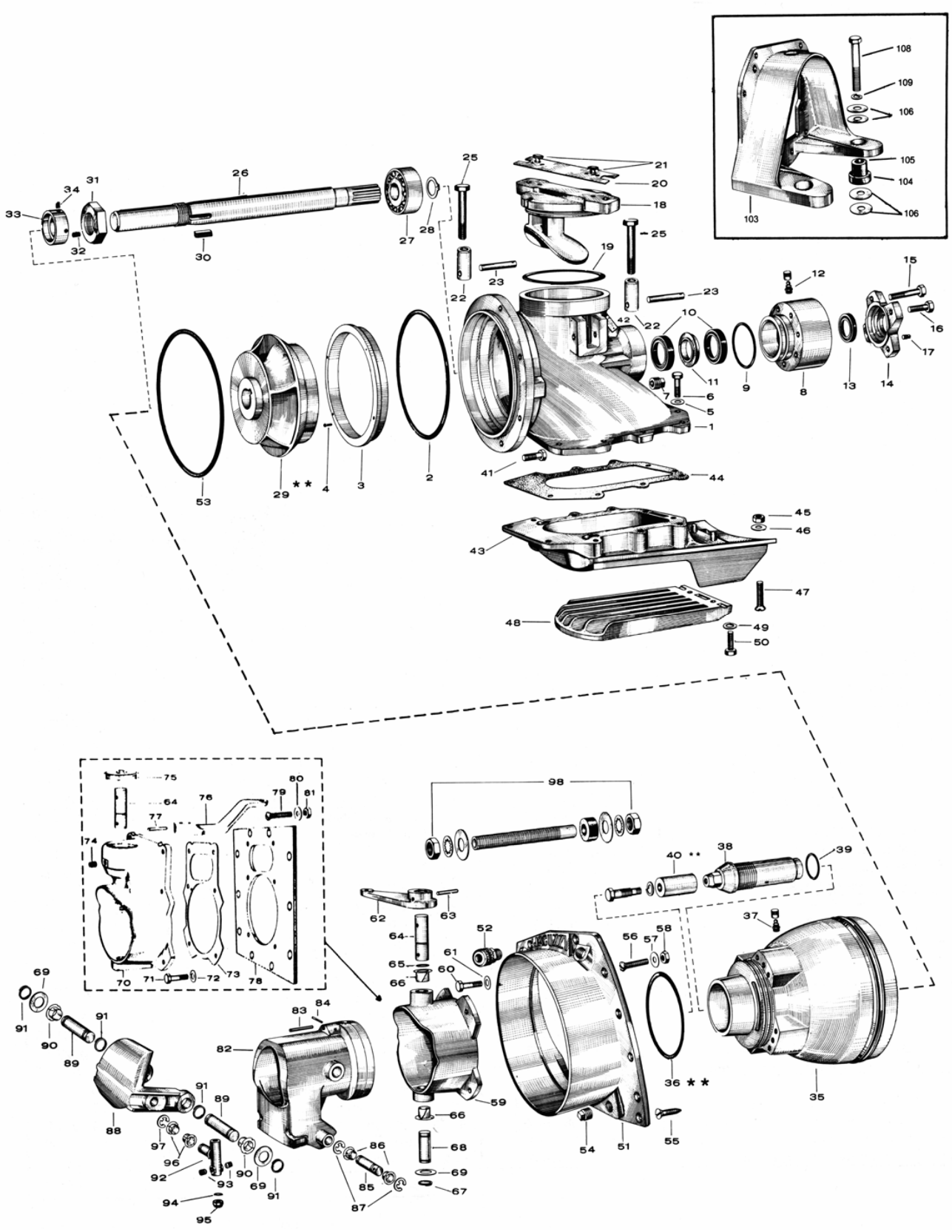
LEGEND

ITEM	DESCRIPTION	QTY.	PART #
1	Suction Piece No. 4990	1	04-1857-08
2	Wear Plate No. 5533	1	08-2243-13
3	Wear Plate O-Ring	1	47-0178-01
4	Wear Plate Dowell Pin	2	14-1773-07
5	Auxiliary Water Outlet Pluq Assy.	1	23-1558-07
6	Thruit Bearing Grease Fitting	1	23-0562-03
7	Inspection Cap No. 4993	1	51-0184-06
8	Inspection Cap O'Ring	1	47-0258-04
9	Inspection Cap Lock Wrench	1	22-1810-02
10	Lock Wrench Nylatch Assy.	2	23-1418-07
11	Hold Down Bolt	2	14-0734-07
12	Inspection Cap Swivel Block	2	51-0201-05
13	Swivel Block Spring Pin	2	14-0802-04
14	Bearing Cap No. 4910	1	08-2399-07
15	Bearing Cap Bolts	4	14-1295-14
16	Bearing Cap Lip Seal	1	SL1007
17	Impeller Adj Shims	AR	14-0829-70
	Effective .010 Movement		
17.1	Impeller Adj Shims	AR	14-1903-70
	Effective .005 Movement		
18	Thrust Bearing Retaining Ring	1	14-0767-07
19	Thrust Bearing	1	B1103
20	Thrust Bearing Washer	1	SH2005
21	Seal Housing Lip	1	SL3508
22	Seal Seal Housing	1	SH2208
23	Seal Housing O-Ring	2	O3108
24	Mechanical Seal	1	SL4008
25	Mechanical Seal Retaining Ring	1	SH1608
26	Impeller Shaft	1	07-5756-08
27.1	Impeller B Cut No. 4906	1	05-3224-09
27.2	Impeller C Cut No. 4906	1	05-3225-08
27.3	Impeller D Cut No. 4906	1	05-3226-07
27.4	Impeller E Cut No. 4906	1	05-3227-06
27.5	Impeller F Cut No. 4906	1	05-3228-05
27.6	Impeller G Cut No. 4906	1	05-3229-04
27.7	Impeller H Cut No. 4906	1	05-3230-01
27.8	Impeller 1 Cut No. 5617	1	05-3231-00
27.9	ImpellerJ Cut No. 5617	1	05-3232-09
27.1	Impeller K Cut No. 5617	1	05-3346-02
28	Impeller Key	1	23-1403-04
29	Impeller Nut	1	23-1491-07
30	Bowl No. 4905	1	04-1856-09
30.1	Water Strainer	2	22-1884-03
31	Bowl Bearing	2	B1505
32	Bowl Bearinq Lip Seal	1	SL2003
33	Bowl Wear Ring	1	08-2244-04
33.1	Cooling Outlet Plug	1	31-0557-00
34	Bowl Wear Ring Bolts	4	14-1490-17
35	Bowl Grease Pitting	1	23-0560-13
36	Bowl Bolts	8	14-0731-00
37	Lock Washer	8	14-0722-01
38	Deflector No. 4997	1	52-0279-01
39	Deflector Nyliner Bearings	2	08-2245-03
40	Deflector Bottom Pivot Pin	1	51-0203-03
41	Bottom Pivot Pin Retaininq Bolt	1	14-1269-16
42	Lock Tab	1	14-1895-00
43	Deflector Trim Pivot Assy.	1	51-0205-01
44	Trim Screw	1	14-0809-07
45	Trim Screw Nut	1	14-0803-03
46	Trim Screw Nut Cotter Pin	1	14-0712-03

ITEM	DESCRIPTION	QTY.	PART #
47	Trim Cap No. 5426	1	51-0208-08
48	Trim Cap Gasket	1	13-0370-07
49	Trim Cap Bolts	6	14-1772-08
50	Trim Set Screw	1	14-0717-08
51	Reverse Gate (Pull to open) 5509	1	52-0313-09
52	Reverse Gate Nyliner Bearings	2	08-2196-02
53	Reverse Gate Pivot Pin	2	52-0280-08
54	Pivot Pin Retaining Bolts	2	14-1268-09
55	Lock Tab	2	14-1895-00
56	Reverse Gate Cable Pin	1	52-0293-03
57	Cable Pin Flat Washer	1	23-1503-03
58	Cable Pin Nyliner Bearing	2	08-2298-09
59	Cable Pin Retaining Ring	1	14-1504-11
60	Cable Lock Nut	1	14-0797-01
61	Tiller Arm. (Pull to open) No. 5573	1	52-0310-02
62	Tiller Arm Bolts	2	14-0737-12
63	Cable Retainer C-Washer	1	23-1502-04
64	Cable Retainer Plug	1	22-1995-09
65	Rudder No. 4975	1	52-0290-06
66	Rudder Bolts	4	14-1268-09
67	Lock Washer	4	14-0721-02
68	Nut	4	14-0725-08
69	Bottom Pivot Washer	AR	14-1856-07
70	Grill Housing Contour No. 4992	1	51-0182-08
70.1	Grill Housing Flat No. 4991	1	51-0185-05
70.2	Grill Housing Deep Vee No. 5525	1	51-0289-00
71	Grill Housing Machine Screws	8	14-1713-00
72	Flat Washers	8	14-0756-00
73	Lock Washers	8	14-1416-18
74	Nut	8	14-0726-07
74.1	Grill Housing Leveling Screws	4	14-1399-50
75	Suction Piece Gasket	1	G1008
76	Suction Piece Bolts	10	14-0731-00
77	Lock Washer	10	14-0722-01
78	Grill Insert Std. No. 5452	1	51-0250-05
78.1	Grill Insert Deep Vee No. 5638	1	51-0290-07
79	Grill Insert Machine Screw	4	14-1404-04
80	Transom Adapter 12° No. 4995	1	52-0275-05
80.1	Transom Adapter 2° No. 4995	1	52-0287-01
81	Transom Adapter O-Ring	1	O2002
82	Transom Adapter Machine Screws F	6	14-1844-02
83	lat Washer	6	14-0756-00
84	Nut	6	14-0726-07
85	Drain Plug 1/2 NPT	1	31-0061-82
86	Cable Sealing Gland	1	23-1504-02
87	Flat Washer	2	23-1503-03
88	Cable Lock Plug	1	22-1995-09
94	Engine Bracket (For Chevrolet, Ford 460 or Oldsmobile)	1	51-0261-02
94.1	Engine Bracket (For Ford or Chrysler)	1	51-0262-01
95	Engine Bracket Rubber Mount	2	23-0557-00
96	Engine Bracket Nut	2	14-1843-03
97	Engine Bracket Washer	2	14-0187-09
98	Engine Bracket Lockwasher	2	14-0723-00
99	Engine Bracket Capscrew	2	14-1539-02
100	Short Coupling Chevy	1	23-1489-01
100.1	Short Coupling Olds	1	23-1490-08
100.2	Short Coupling Ford 460	1	23-1519-05
101 102	Steering Tube	1	51-0431-07
	Sock Cap Olds & Chevy	4	14-1731-08
102.1	Sock Cap Ford 460	6	14-0805-01

AMERICAN TURBINE

OEM JACUZZI 12WJ



AMERICAN TURBINE

OEM JACUZZI 12WJ

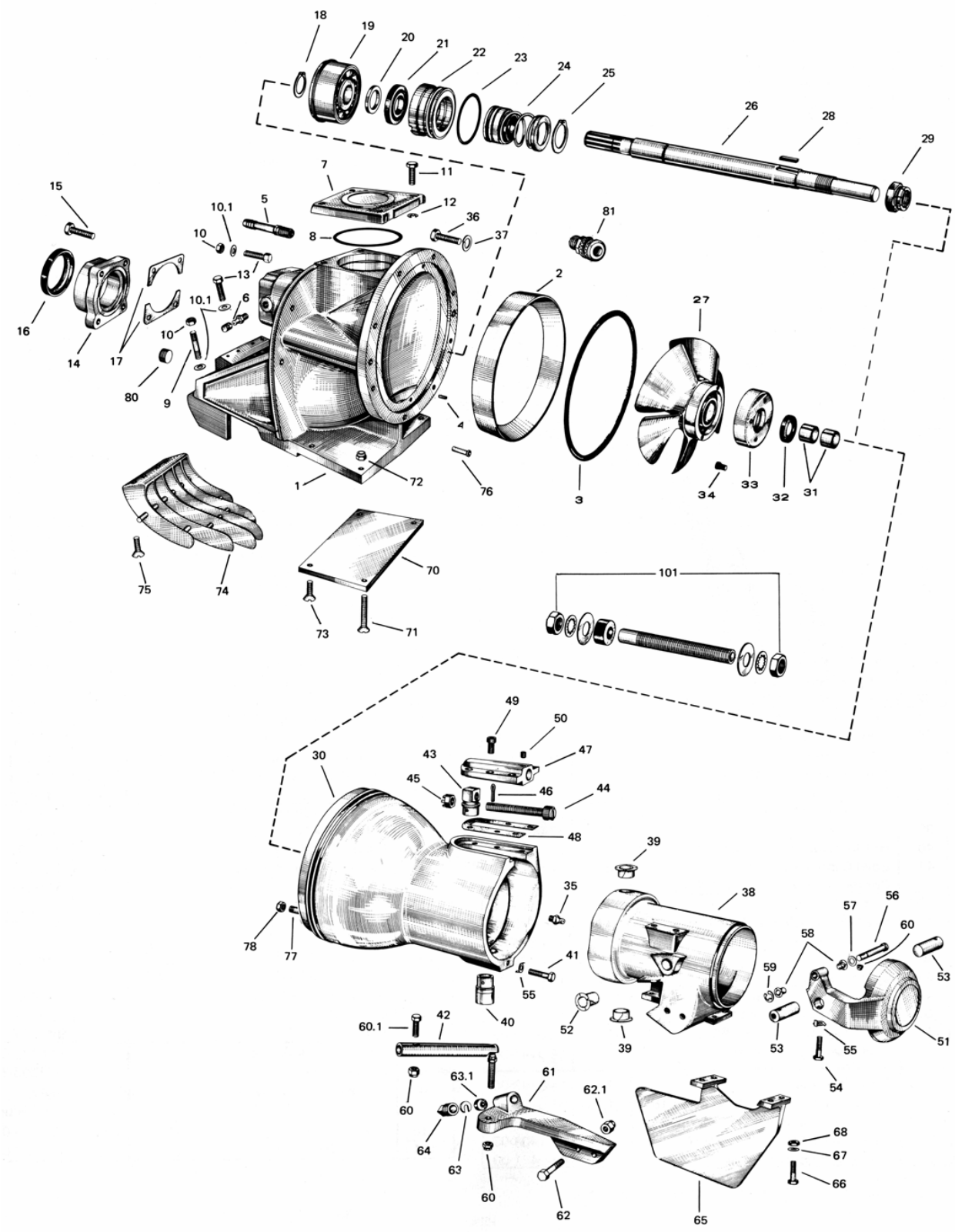
LEGEND

ITEM	DESCRIPTION	QTY	PART #
1	Suction Piece No. 4779	1	04-2012-08
2	Suction Piece O-Ring	1	O3101
3	Suction Piece Wear Ring	1	08-2383-13
4	Wear Ring Self-Tapping Screws	4	14-1447-60
5	Suction Piece Washers	10	14-0740-41
6	Suction Piece Capscrews	10	14-0731-00
7	Suction Piece Pipe Plug	1	31-0061-66
8	Bearing Housing No. 3982	1	08-2047-11
9	Bearing Housing O-Ring	1	O3108
10	Bearing Housin;) Lip Seals	2	SL3608
11	Lip Seal Back Up Plate	1	SH2108
12	Bearing Grease Fitting	1	23-0562-03
13	Bearing Cap Lip Seal	1	SL1107
14	Bearing Cap No. 4365	1	08-2205-27
I5	Bearing Housing Capscrews	4	14-1303-30
16	Bearing Capscrews	4	14-0731-00
17	Bearing Cap Pipe Plug	1	31-0058-46
18	Inipection Cap No. 4761	1	51-0104-03
19	Inspection Cap O-Ring	1	O3208
20	Inspection Cap Lock Wrench	1	22-1810-02
21	Wrench Nylatch Assembly	2	23-1418-07
22	Swivel Block	2	51-0201-05
23	Swivel Block Pin	2	14-0802-04
25	Hold Down Capscrew	2	14-0734-07
26	Splined Impeller Shaft		07-5271-04
27	Thrust Bearing	1	B1007
28	Bearing Retaining Ring	1	SH1507
29	Impeller 9.9/16 Dia. "A" Cut (Alum.)	1	05-2528-04
29.1	Impeller 9-3/8 Oia. "B" Cut (Alum.)	1	05-2529-03
29.2	Impeller 9-1/4 Dia. "C" Cut (Alum.)	1	05-2530-00
29.3	Impeller 9-1/8 Dia. "D" Cut (Alum.)	1	05-2531-09
29.4	Impeller 9 Dia. "E" Cut (Alum.)	1	05-2532-08
30	Impeller Key	1	14-0614-02
31	Impeller Nut	1	14-0606-02
32	Impeller Nut Setscrews	2	14-0717-08
33	Bowl Bearing Sand Cap	1	08-2044-06
34	Bowl Bearing Sand Cap Setscrew	2	14-0724-09
35	Bowl No. 4417	1	04-1548-03
36	Bowl to Steering Housing O-Ring	1	O3208
37	Bowl Grease Fitting W/Cap	1	23-0562-03
38	Bowl Bearing No. 3980	1	08-2043-15
39	Bowl Bearing O-Ring	1	47-0032-07
40	Hi Flow Nozzle Plug Assembly	1	50-0056-02
41	Bowl Capscrews	8	14-0731-00
43	Contour Grill Housinq No. 4920	1	51-0175-07
43.1	Flat Grill Housing No. 4418	1	51-0171-19
43.2	Vee Grill Housing No. 4418	1	51-0138-03
44	Suction Piece Bottom Gasket	1	13-0854-02
45	Grill Housing Nut	14	14-0726-07
46	Grill Housinq Washer	14	14-0756-00
47	Grill Housing Machine Screws	14	14-1713-00
48	Grill Insert Std. No. 4419	1	51-0102-05
48.1	Grill Insert Contour No. 5523	1	51-0273-08
49	Grill Insert Lock Washers	2	14-0745-04
50	Grill Insert Capscrews	2	14-0743-06
51	Transom Adapter No. 4889 9°to 18°	1	52-0262-00
51.1	Transom Adapter No. 4431 2°to 9°	1	52-0256-08

ITEM	DESCRIPTION	QTY	PART #
52	Cable Gland Assembly 1/2 NPT	1	23-1408-09
53	Transom Adapter O-Ring	1	O2002
54	Transom Adapter Drain Plug	1	31-0061-66
55	Transom Adapter Wood Screws	2	23-0572-01
56	Transom Adapter Capscrew	10	14-1713-00
57	Transom Adapter Washer	10	14-0756-00
58	Transom Adapter Nuts	10	14.0726-07
59	Steering Housing No. 4766	1	52-0248-09
60	Steering Housing Capscrews	4	14-0731-00
61	Steering Housing Washers	4	14-0740-41
62	Tiller Arm No. 4764	1	52-0249-24
63	Tiller Arm Groove Pin	1	14-1573-09
64	Deflector Top Pivot Pin	1	52-0238-01
65	Top Pivot Pin O-Ring	1	47-0114-08
66	Deflector Pivot Bearing	2	08-2196-02
67	Pivot Pin Retaining Rings	1	14-1918-03
68	Deflector Bottom Pivot Pin	1	52-0359-04
69	Spacer Washers for Pivot Pins	12	52-0078-04
70	Steering Housing No. 4413-0	1	52-0240-07
71	Steering Housing Cap Screws	6	14-0731-00
72	Steering Housing Washers	6	14-0740-41
73	Steering Housing Gasket	1	13-0848-01
74	Steering Housing Pipe Plug	1	31-0059-94
75	Steering Housing Cap	1	31-0379-96
76	Tiller Arm No. 4416	1	52-0236-03
77	Tiller Arrn Groove Pin	1	14-1573-09
78	Steering Housing Adapter	1	52-0128-12
79	Steering Housing Adapter Cap Screws	10	14-1713-00
80	Steering Housing Adapter Washer	10	14-0756-00
81	Steering Housing Adapter Nuts	10	14-0726-07
82	Deflector No. 4414	1	52-0241-06
83	Top Pivot Pin Groove Pin	1	14-0804-02
84	Groove Pin Spring Pin	1	14.1521-02
85	Cable Pivot Pin	1	52-0239-00
86	Cable Pivot Pin Bearings	2	08-2195-11
87	Cable Pivot Pin Retainer	2	14-0775-07
88	Reverse Gate No. 4415	1	52-0242-05
89	Reverse Gate Pivot Pin	2	52-0237-02
90	Reverse Gate Pivot Bearings	2	08-2196-02
91	Pivot Pin Retaining Rings	4	14-0774-08
92	Shift Cable Pivot Bracket No. 4751	1	52-0244-03
93	Cable Pivot Bracket Setscrews	2	14-0052-19
94	Cable Pivot Bracket O-Ring	1	47-0008-07
95	Cable Lock Nut	1	14-0797-01
96	Cable Pivot Bracket Bearings	2	08-2195-11
97	Cable Pivot Bracket Retainer	1	14-0775-07
98	Steering Tube for Ridguide, Morse & Teleflex	1	51-0431-07
103	Engine Bracket (Chevy. Olds & 460 Ford)	1	51-0236-04
103.1	Eng Bracket (Ford & Chrysler).	1	51-0251-04
104	Rubber Engine Mount	2	23-0557-00
105	Spacer Sleeve	2	22-1105-06
106	Washer	8	9911-2716
107	Stainless Lock Washer	2	14-0722-01
108	Stainless Hex Cap	2	14-1303-30
109	Rockwell Shaft Assy.	1	See 12Y Section
110	Salety Tilt Rudder	opt	52-0233-06
111	Rudder Sheer Pin (Pkg. of 5)	opt	52-0259-05

AMERICAN TURBINE

OEM JACUZZI 12YJ
GOLDEN EAGLE



AMERICAN TURBINE

OEM JACUZZI 12YJ
GOLDEN EAGLE

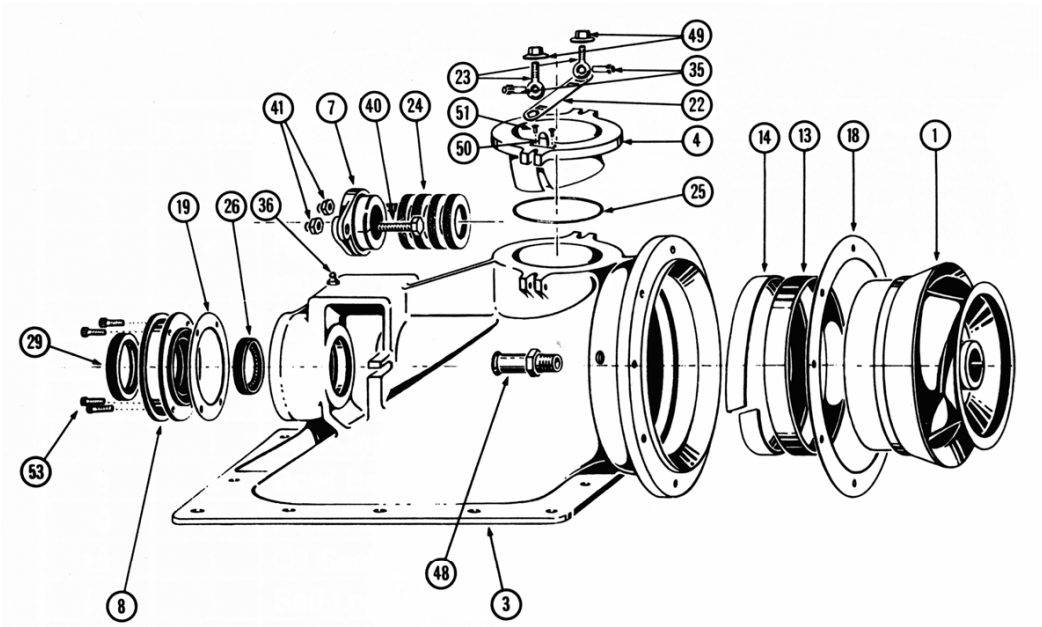
LEGEND

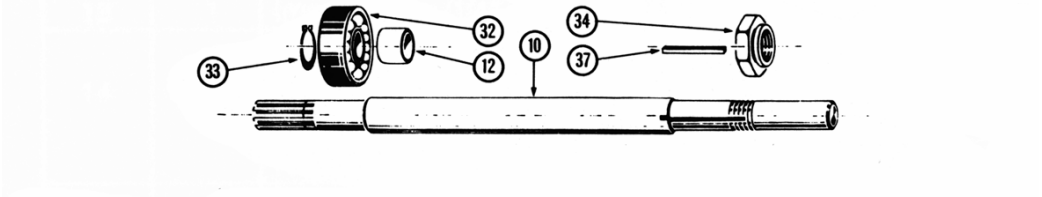
ITEM	DESCRIPTION	QTY.	PART #
1	Suction Piece No. 5737	1	04-2282-01
2	Wear Plate No. 5533. Ni-resist	1	08-2243-13
3	Wear Plate. O-Ring	1	47-0178-01
4	Dowel Pin	2	14-1773-07
5	Cooling Water Tube	1	31-0804-01
6	Grease Fitting	1	23-0562-03
7	Inipection cap No. 5764	1	51-0494-01
8	Intpection Cap O-ring	1	47-0248-07
9	Suction Piece Stud	3	14-0576-08
10	Nut	7	14-0727-06
10.1	Washer	11	14-0740-41
11	Inspection Cap Bolt	4	14-0743-06
12	Snap Ring	4	14-1594-04
13	Mounting Bolt	8	14-1296-21
14	Bearing Cap No. 4910	1	08-2399-07
15	Bearing Cap Bolt	4	14-1295-14
16	Bearing Cap Lip Seal	1	SL1007
17	Impeller Adj. Shim. 031	AR	14-0829-03
17.1	Impeller Ad). Shim. 015	AR	14-1903-00
18	Retaining Ring	1	SH1507
19	Thrust Bearing	1	B1103
20	Thrust Brg. Washer	1	SH2005
21	Lip Seal	1	SL3508
22	Seal Housing No. 5765	1	10-1387-09
23	Seel Housing O-Ring	2	O3108
24	Mechanical Seal	1	SL4008
25	Retaining Ring	1	SH1608
26	Impeller Shaft	1	07-5756-08
27.1	Imepller B Cut No. 4906	1	05-3224-09
27.2	Impeller C Cut No. 4906	1	05-3225-08
27.3	Impeller D Cut No. 4906	1	05-3226-07
27.4	Impeller E Cut No. 4906	1	05-3227-06
27.5	Impeller F Cut No. 4906	1	05-3228-05
27.6	Impeller G Cut No. 4906	1	05-3229-04
27.7	Impeller H Cut No. 4906	1	05-3230-01
27.8	Impeller K Cut No. 5657	1	05-3346-02
28	Impeller Key	1	23-1403-04
29	Impeller Nut	1	23-1491-07
30	Bowl No. 4905	1	04-2202-08
31	Bowl Bearing	2	B1505
32	Bowl Bearing Lipseal	1	SL2003
35	Grease Fitting	1	23-0560-13
36	Bowl Bolt	6	14-0731-00
37	Lockwasher	8	14-0722-01
38	Deflector No. 4997	1	52-0374-05

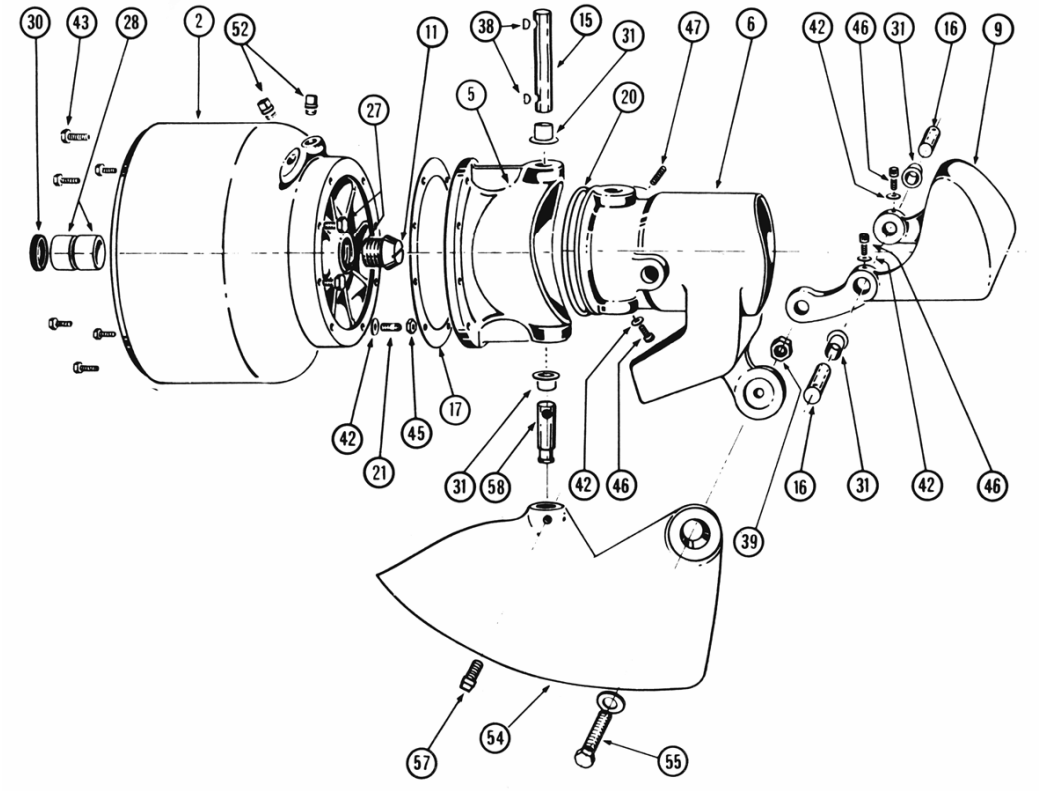
ITEM	DESCRIPTION	QTY.	PART #
39	Nyliner Bearing	2	08-2245-03
40	Deflector Btm. Pivot Pin	1	51-0203-03
41	Retaining Bolt	1	14-1269-16
42	Tiller Arm Extension	1	51-0500-03
43	Trim Pivot Assy.	1	61-020S-01
44	Trim Screw	1	14-0809-07
45	Castle Nut	1	14-0803-03
46	Cotter Pin	1	14-0712-03
47	Trim Cap	1	51-0208-08
48	Trim Cap Gasket	1	13-0370-07
49	Trim Cap Bolt	6	14-1772-08
50	Trim Set Screw	1	14-0717-08
51	Reverse Gate No. 5766	1	52-0372-07
52	Nyliner Bearing	2	08-2196-02
53	Rev. Gate Pivot Pin	2	52-0280-08
54	Retaining Bolt	2	14-1268-09
55	Lockwasher	3	14-1895-00
56	Cable Pin	1	52-0293-03
57	Cable Pin Fit. Washer	1	23-1503-03
58	Nyliner Bearing	2	08-2298-09
59	Cable Pin Retain. Ring	1	14-1504-11
60	Locknut	2	14-0392-00
60.1	Tiller Arm Ext. Bolt	1	14-0580-02
61	Tiller Arm No. 5767	1	52-0371-08
62	Tiller Arm Bolt	2	14-1297-12
62.1	Locknut	2	14-1922-07
63	S. S. C-Wsh Cablelock 33	1	23-1502-04
63.1	33C Packing	1	23-2223-00
64	Cable Lock Plug	1	22-1995-09
65	Rudder No. 4998	1	52-0290-46
66	Rudder Bolt	4	14-1268-09
67	Lock Washer	4	14-0721-02
68	Nut	4	14-4725-08
69	Bottom Pivot Washer	AR	14-1856-07
70	Trim Plate	1	51-0497-08
71	Machine Screw	2	14-1556-00
72	Locknut	2	14-0263-06
73	Machine Screw	2	14-1404-44
74	Grill Insert	1	51-0496-09
75	Grill Insert Machine Screw	4	14-1404-04
76	NyttiteSeal	2	14-1893-42
77	Bowl Stud	2	14-4341-42
78	Nut	2	14-4727-06
80	Aluminum Plug	1	31-4672-40
81	Cable Gland Assy. 1/2 NPT	1	23-1406-09
101	Steering Tube	1	51-0431-47

AMERICAN TURBINE

OEM BERKELEY 12JG







AMERICAN TURBINE

OEM BERKELEY 12JG

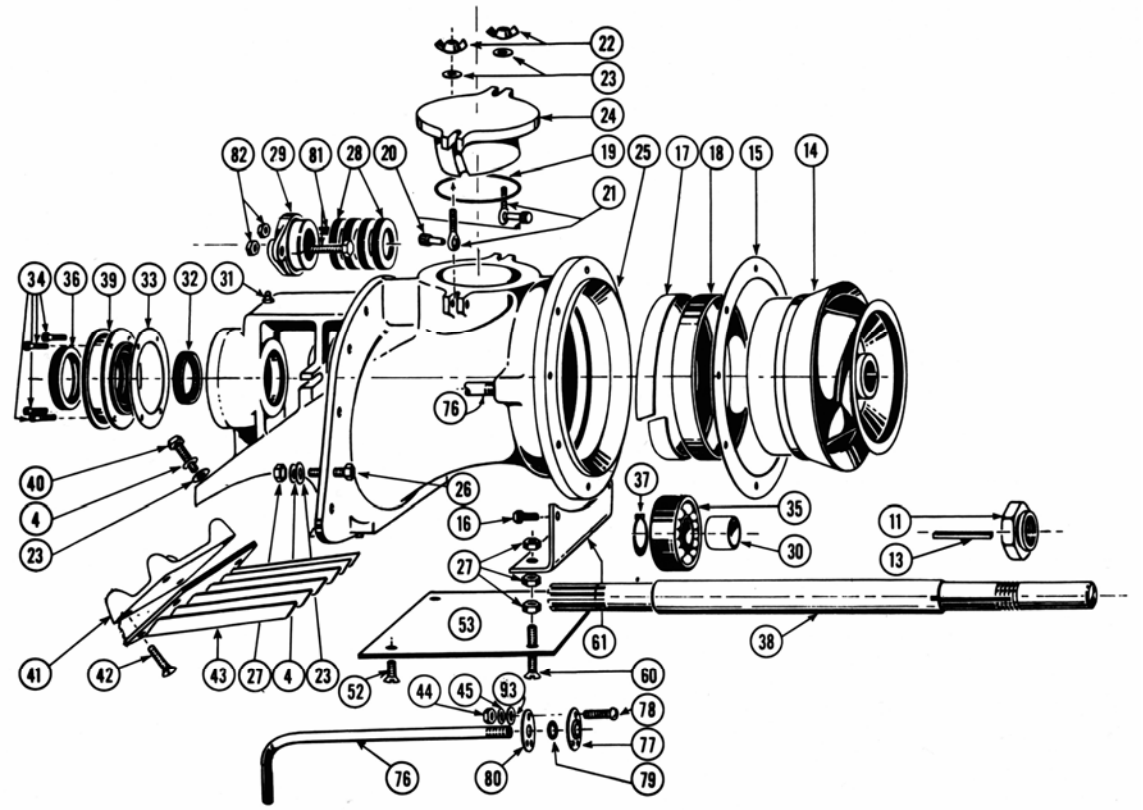
LEGEND

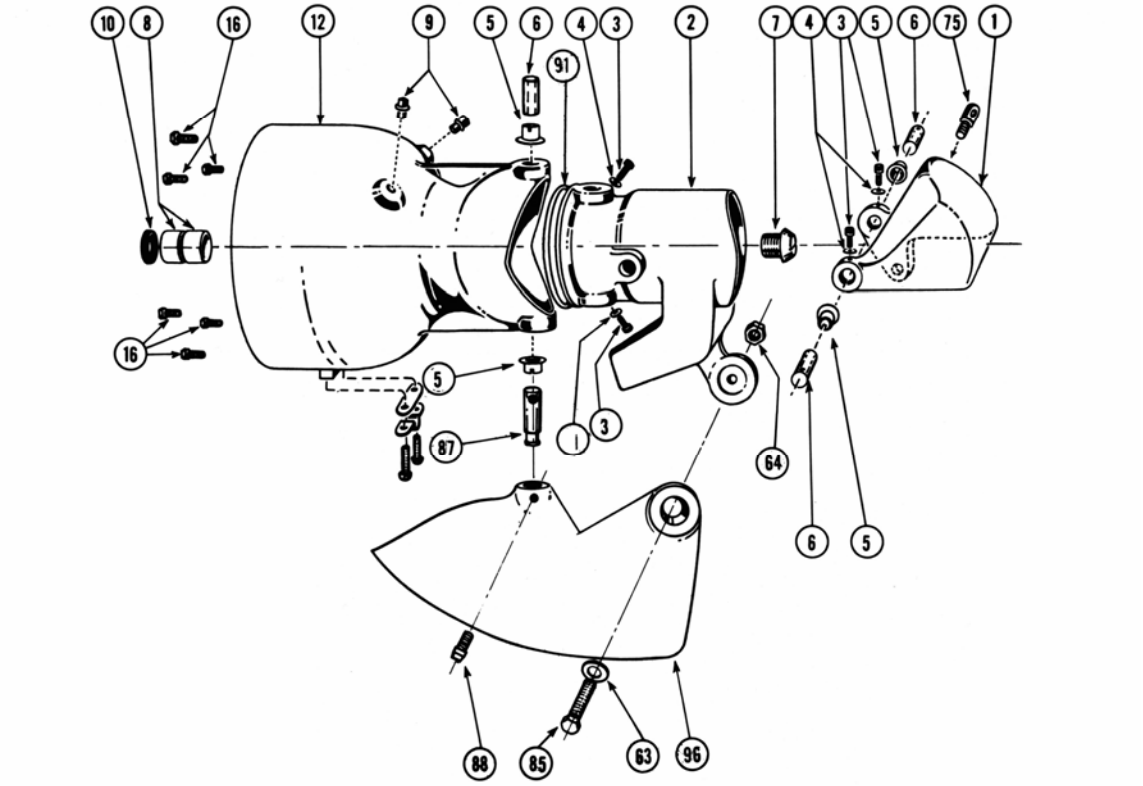
SYM.	DESCRIPTION	QTY.	PART NO.
1	Aluminum Impeller	1	IMB***
2	Bowl	1	SC9102
3	Suction Piece	1	H-1727
4	Hand Hole Cover	1	M-4128
5	Nozzle Housing	1	R1007
6	Steerable Nozzle	1	L-4501
7	Split Gland, Packing	1	SC2507
8	Bearing Cap	1	SC2007
9	Reverse Bucket	1	L-4251
10	Pump Shaft	1	SH1007
11	Bowl Bearing End Cap	1	SCA9001
12	Sleeve, Shaft Seal	1	SH2507
13	Impeller Wear Ring	1	WR5000
14	Wear Ring Insulator	1	WR6004
15	Tiller Shaft	1	S-15396
16	Reverse Bucket Shaft	2	R3701
17	Bowl to Nozzle Gasket	1	G2507
18	Bowtl to Suction Gasket	1	G2006
19	Bearing Cap Gasket	1	G1502
20	O-Ring Nozzle	1	O1502
22	Wrench, Hand Hole Cover	1	S-11543
23	Rod End, Hand Hole Cover	2	S-10907
24	Set (5) Packing Rings	5	SC3007
25	O-Ring, Hand Hole Cover	1	O1002
26	Suction Piece Clipper Seal	1	SL1507
27	Bowl To Nozzle (5/16 x 3/4)	1	S-23538
28	Bowl Bearing (Glacier)	2	B1502

SYM.	DESCRIPTION	QTY.	PART NO.
29	Bearing Cap Clipper Seal	1	SL1007
30	Bowl Clipper Seal	1	SL2003
31	Nyliner Bearing	4	B2007
32	Ball (Thrust) Bearing	1	B1007
33	Retaining Ring, Bearing	1	SH1507
34	Impeller Nut	1	SH2507
35	Groove Pin, Hand Hole Cover	2	S-14479
36	Grease Fitting, Bearing	1	S-14480
37	Impeller Key	1	SH3007
38	Woodruff Key, Tiller Shaft	2	R5507
39	Locknut (3/8" - 24)	1	F06 24 LN
40	Packing Gland Bolt (3/8 x 2 HHCS)	2	F06 24 16 HH
41	Packing Gland Nut (3/8)	2	F06 24 TL
42	5/16 LockWasher	11	F05 LW
43	Bowl To Suction (1/2 x 1-1/4 HHCS)	8	F08 13 10 HH
46	Nozzle & Bucket (5/16 x 1 SHCS)	3	F05 18 08 SH
47	Set Screw, Tiller Shaft (5/16 x 3/4)	1	F05 18 06 SQ
48	Barbed Connector	1	S-14821
49	Flange Nut, Hand Hole Cover (5/16)	2	S-23680
50	Fastener, Lock Wrench	1	S-14493
51	Fastener Screw	2	S-25599
52	Pipe Plug, Oil Reservoir	2	SC9902
53	Bearing Cap (5/16 x 1-1/4 SHCS)	4	F05 18 10 SH
54	Plastic Rudder Kit		B-07486
55	5/16 - 18 x 1 HHCS	7	F05 18 08 HH
56	5/16 - 18 x 7/8 HHCS	1	F05 18 07 HH

AMERICAN TURBINE

OEM BERKELEY 12JE





AMERICAN TURBINE

OEM BERKELEY 12JE

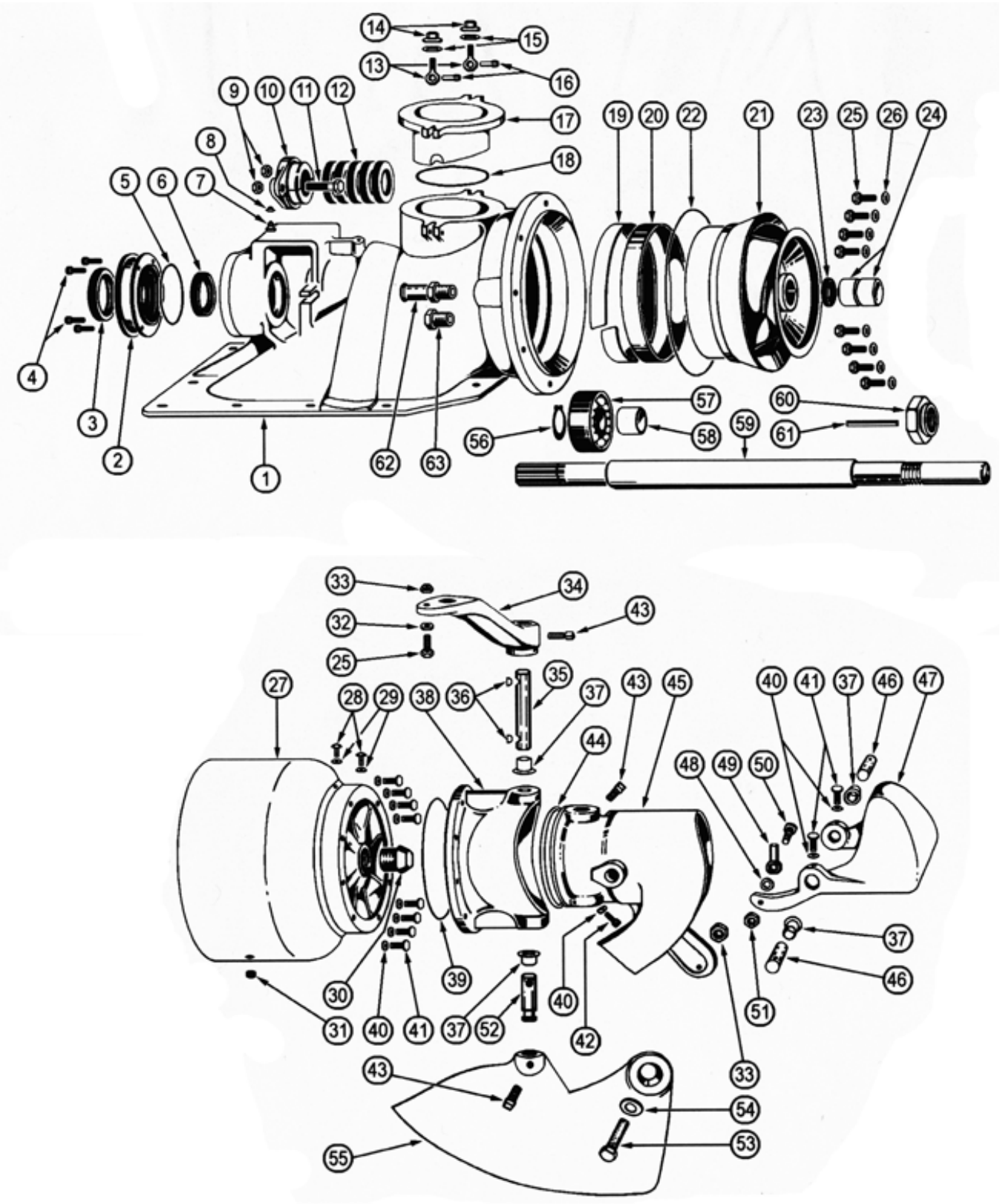
LEGEND

SYM	DESCRIPTION	QTY	PART NO.
1	Reverse Bucket	1	L-4433
2	Nozzle	1	L-4405
3	5/16-18 x 1 HHCS	4	F05 18 08 HH
4	5/16 Spring Lock Washer	22	F05 LW
5	Nyliner Bearing	4	B2007
6	Shaft (3/4 O.D. x 1-9/16 long)	3	S-10825
7	End Cap	1	SCA9001
8	Bowl Bearing, Glacier	2	B1502
9	Pipe Plug	2	SC9902
10	Oil Seal	1	SL2003
11	Self Locking Nut	1	S-12005
12	Bowl	1	SC9102
13	Impeller Key	1	SH3007
14	Aluminum Impeller	1	IMB***
15	Gasket	1	G2006
16	1/2 - 13 x 1-1/4 HHCS	8	F08 13 10 HH
17	Wear Ring Insulator	1	WR6004
18	Wear Ring	1	WR5000
19	O-Ring	1	O1002
20	Pin, Groove, Type 24	2	S-14479
21	Rod End	2	S-10907
22	Wing Nut	2	S-16117
23	Flat Washer (5/16)	22	F05 FW
24	Hand Hole Cover	1	M-6098
25	Suction Piece	1	H-2715
26	5/16 - 18 x 1-3/4	10	F05 18 14 HH
27	Hex Nut (5/16)	17	F05 HN
28	Packing Ring Set	5	SC3007
29	Split Gland	1	SC2507
30	Sleeve, Seal	1	SH2507
31	Grease Fitting	1	S-14480
32	Grease Seal	1	SL1507
33	Bearing Cap Gasket	1	G1502
34	5/16 - 18 x 1-1/4 HHCS	4	F05 18 10 HH
35	Ball Bearing	1	B1007
36	Oil Seal	1	SL1007
37	Retaining Ring	1	SH1507
38	Pump Shaft	1	SH1007
39	Bearing Cap	1	SC2007
40	5/16 - 18 x 1 HHCS	6	F05 18 08 HH
41	Grate Retainer	1	I4307
42	1/4 - 20 x 1-1/4 Machine Screw	4	S-25669
43	Intake Grate	1	I4207
44	Hex Nut (1/4)	6	F04 HN
45	Spring Lock Washer	6	F04 LW
46	Flat Washer (1/4 x 1/2 O.D.)	3	S-16401
47	1/4 - 20 x 2 Machine Screw	3	S-24507

SYM	DESCRIPTION	QTY	PART NO.
48	Reverse Cable Seal Bearing	2	S-16254
49	Hex Nut, Jam (7/8 - 14)	1	F14 14 JN
50	Flat Washer (7/8)	2	S-27129
51	Hose Clamp	2	S-16416
52	5/16 - 18 x 3/4 Machine Screw	2	S-23538
53	Cavitation Plate	1	S-16567
54	Steering Adapter	1	S-16273
55	Reverse Cable Seal Housing	1	S-16274
56	Reverse Cable Seal Retainer	1	S-16255
57	O-Ring (7/16 I.D. x 5/8 O.D.)	1	S-14929
58	Hose Clamp	2	S-16415
59	Rubber Bellows	2	M4007
60	5/16 - 18 x 2 Machine Screw	2	S-25685
61	Cavitation Plate Bracket	1	M-5840
62	Steering Extension	1	M-5881
63	Flat Washer (3/8)	3	F06 FW
64	Hex Self-Locking Nut	2	F06 24 LN
65	3/8 - 24 x 1-1/2 HHCS	1	F06 24 12 HH
66	Hex Nut (3/8 - 24)	1	F06 24 HN
67	Shoulder Screw	1	S-17824
68	Cotter Pin (3/32 x 1/2)	1	S-26611
69	Clevis Pin (5/16)	1	S-16350
70	Reverse Cable, Clevis	1	S-17843
71	Steering Tiller	1	M-5875
72	5/16 - 18 x 3/4 HHCS	2	F05 18 06 HH
73	Jam Nut (5/16 - 18)	1	S-27157
74	Reverse Swivel Pin Bearing, Nyliner	2	S-13865
75	Reverse Swivel Pin	1	S-16344
76	Engine Cooling Water Pipe	1	M-5773
77	Engine Cooling Water Pipe Retainer	1	S-15904
78	1/4 - 20 x 1-1/4 Machine Screw	3	S-24504
79	O-Ring	1	S-16022
80	Back-up Plate	1	S-15905
81	3/8 - 16 x 2 HHCS	2	F06 16 16 HH
82	Hex Self-Locking Nut (3/8 - 16)	2	F06 16 LN
83	Hex Nut #10-32	2	S-23479
84	Cable Clamp	1	S-18429
85	Machine Screw Round Head	2	S-24472
86	Spring Lock Washer #10	2	S-23085
88	5/16 - 18 x 5/8 Set Screw	1	S-23664
89	3/8 - 24 x 1-3/4 HHCS	1	S-32394
91	O-Ring, Nozzle	1	O1502
92	Slotted Nut, Lock (5/16 - 18)	1	S-32399
93	Washer, Plain (1/4)	3	S-23061
94	Cotter Pin	1	S-26612
95	Cotter Pin	2	S-26619
96	Plastic Rudder Kit	2	B-07486

AMERICAN TURBINE

OEM LEGEND J120-G



AMERICAN TURBINE

OEM LEGEND J120-G

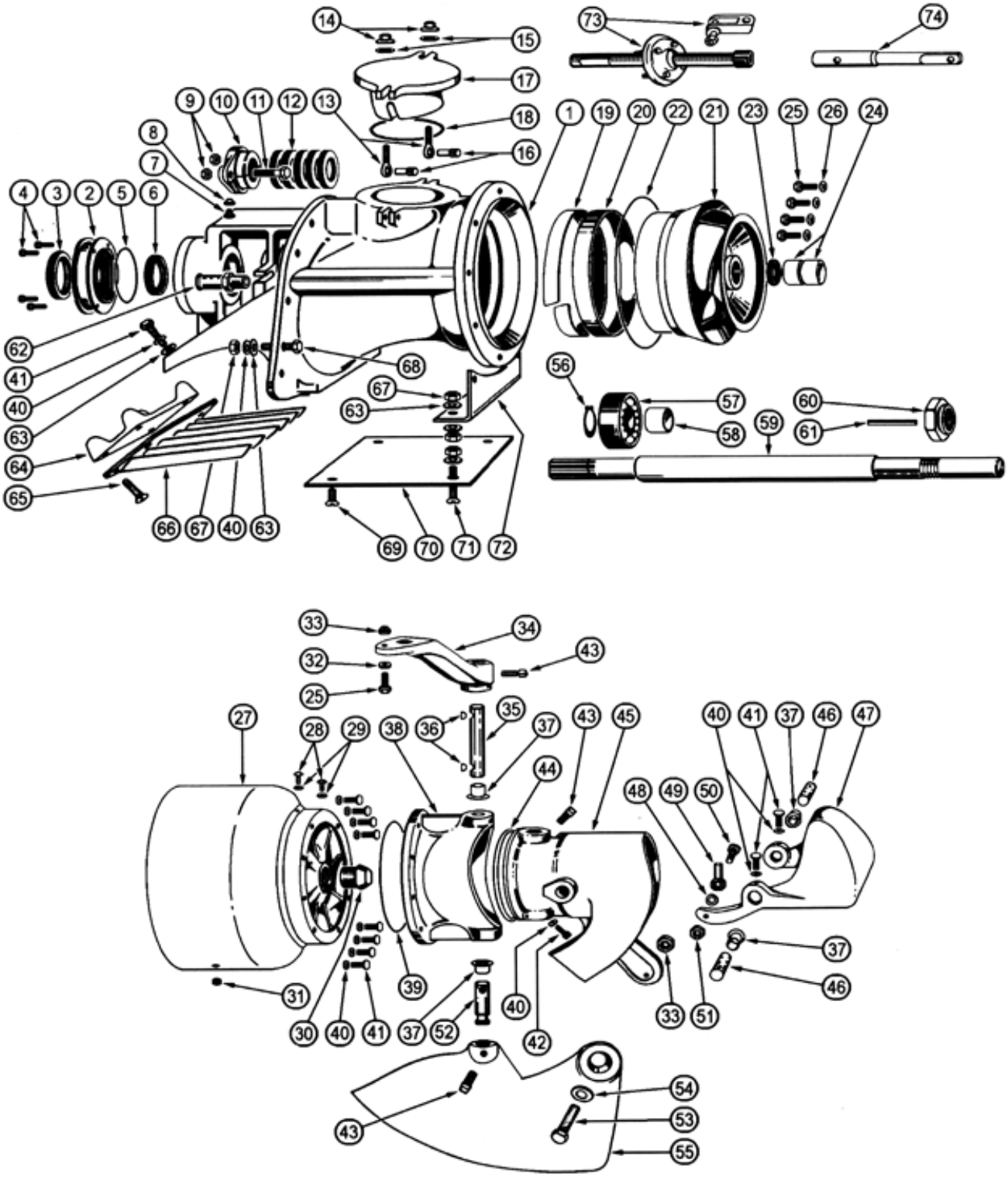
LEGEND

SYM	DESCRIPTION	QTY	PART NO.
1	Suction Piece	1	J0726
2	Bearing Cap	1	J0338
3	Bearing Cap Seal	1	SL1007
4	Bearing Cap Screw	4	J0908
5	Bearing Cap O-Ring	1	J0102
6	Suction Piece Seal	1	SL1507
7	Grease Fitting	1	J0480
8	Grease Fitting Cap	1	J1005
9	Pack Gland Nut	2	J0916
10	Packing Gland (Pair)	1	SC2507
11	Pack Gland Bolt	2	J0917
12	Packing Ring	5	SC3007
13	Rod End	2	J0907
14	Flange Nut	2	J0680
15	Hand Hole Washer	2	J0902
16	Groove Pin	2	J0479
17	Hand Hole Cover	1	J0129
18	Hand Hole Cover O-Ring	1	O1002
19	Insulator	1	WR6004
20	Wear Ring	1	WR5000
21	Impeller	1	IMB***
22	Bowl / Suction Piece O-Ring	1	J0100
23	Bowl Seal	1	SL2003
24	Bowl Bearing	2	B1502
25	3/8" Hex Head Cap Screw	9	J0918
26	Bowl Washer	8	J0909
27	Bowl	1	J0496
28	Oil Plug 1/4-28	2	J0938
29	1/4" Nylon Washer	2	J0104
30	Bowl End Cap	1	J0850
31	1/8" Pipe Plug	1	J0883
32	3/8" Jam Nut	1	J0913

SYM	DESCRIPTION	QTY	PART NO.
33	3/8" Lock Nut	2	J0912
34	Steering Tiller	1	J0645
35	Tiller Shaft	1	J0397
36	Woodruff Key	2	R5507
37	Nyliner Bearing	4	B2007
38	Nozzle Housing	1	J0027
39	Nozzle Housing O-Ring	1	J0101
40	5/16" Lock Washer	11	F05 LW
41	5/16" HHCS	10	J0915
42	5/16" SHCS	1	J0927
43	5/16" Square Head Cap Screw	3	J0920
44	Nozzle O-Ring, Teflon	1	O1505
45	Nozzle	1	J0405
46	Reverse Bucket Pin	2	J0826
47	Reverse Bucket	1	J0250
48	1/4" Flat Washer	1	F04 FW
49	Ball Joint Rod End	1	J0107
50	1/4" HHCS	1	J0904
51	1/4" Lock Nut	1	J0905
52	Rudder Pin	1	J0753
53	3/8" Rudder Bolt	1	J0945
54	3/8" Rudder Washer	1	J0901
55	Rudder	1	J0596
56	Retainer Ring (.094)	1	J0484
57	Thrust Bearing	1	B1007
58	Shaft Sleeve	1	SH2507
59	Pump Shaft	1	SH1107
60	Impeller Nut	1	SH3507
61	Impeller Key	1	SH3007
62	Barb 3/4 Hose x 1/2 MPT	1	J0818
63	1/2" Pipe Plug	1	J0820

AMERICAN TURBINE

OEM LEGEND J120-E



AMERICAN TURBINE

OEM LEGEND J120-E

LEGEND

SYM	DESCRIPTION	QTY	PART NO.
1	Suction Piece	1	J0715
2	Bearing Cap	1	J0338
3	Bearing Cap Seal	1	SL1007
4	Bearing Cap Screw	4	J0908
5	Bearing Cap O-Ring	1	J0102
6	Suction Piece Seal	1	SL1507
7	Grease Fitting	1	J0480
8	Grease Fitting Cap	1	J1005
9	Pack Gland Nut	2	J0916
10	Packing Gland (Pair)	1	SC2507
11	Pack Gland Bolt	2	J0917
12	Packing Ring	5	SC3007
13	Rod End	2	J0907
14	Flange Nut	2	J0680
15	Hand Hole Washer	2	J0902
16	Groove Pin	2	J0479
17	Hand Hole Cover	1	J0098
18	Hand Hole Cover O-Ring	1	O1002
19	Insulator	1	WR6004
20	Wear Ring	1	WR5000
21	Impeller	1	IMB***
22	Bowl / Suction Piece O-Ring	1	J0100
23	Bowl Seal	1	SL2003
24	Bowl Bearing	2	B1502
25	3/8" Hex Head Cap Screw	9	J0918
26	Bowl Washer	8	J0909
27	Bowl	1	J0496
28	Oil Plug 1/4-28	2	J0938
29	1/4" Nylon Washer	2	J0104
30	Bowl End Cap	1	J0850
31	1/8" Pipe Plug	1	J0883
32	3/8" Jam Nut	1	J0913
33	3/8" Lock Nut	2	J0912
34	Steering Tiller	1	J0645
35	Tiller Shaft	1	J0397
36	Woodruff Key	2	R5507
37	Nyliner Bearing	4	B2007

SYM	DESCRIPTION	QTY	PART NO.
38	Nozzle Housing	1	J0027
39	Nozzle Housing O-Ring	1	J0101
40	5/16" Lock Washer	27	F05 LW
41	5/16" HHCS	17	J0915
42	5/16" SHCS	1	J0927
43	5/16" Square Head Set Screw	3	J0920
44	Nozzle O-Ring, Teflon	1	O1505
45	Nozzle	1	J0405
46	Reverse Bucket Pin	2	J0826
47	Reverse Bucket	1	J0250
48	1/4" Flat Washer	1	F04 FW
49	Ball Joint Rod End	1	J0107
50	1/4" HHCS	1	J0904
51	1/4" Lock Nut	1	F04 20 LN
52	Rudder Pin	1	J0753
53	3/8" Rudder Bolt	1	J0945
54	3/8" Rudder Washer	1	J0901
55	Rudder	1	J0596
56	Retainer Ring (.094)	1	J0484
57	Thrust Bearing	1	B1007
58	Shaft Sleeve	1	SH2507
59	Pump Shaft	1	SH1107
60	Impeller Nut	1	SH3507
61	Impeller Key	1	SH3007
62	Barb 3/8 Hose x 1/2 MPT	1	J0818
63	5/16" Flat Washer	22	F05 FW
64	Grate Retainer	1	J0410
65	5/16 x 1-1/4 FHMS	4	J0944
66	Intake Grate	1	J0411
67	5/16-18 Hex Nut	16	F05 18 HN
68	5/16 x 1-3/4 HHCS	10	F05 18 14 HH
69	5/16 x 3/4 FHMS	2	F05 18 06 FH
70	Cavitation Plate	1	J0567
71	5/16 x 2 FHMS	2	F05 18 16 FH
72	Cavitation Plate Bracket	1	J0840
73	Splashwell / Clevis Kit	1	J0887
74	Steering Extension	1	J0892

AMERICAN TURBINE

STEERINGS

HTR II
PART # RSK2101

Highest Reverse Thrust. Un-equaled low speed control of any type steering nozzle.

DOMINATOR
PART # RA1703

Standard steering on Dominator Jets.

TURBINE TRIM
PART # RA8507

Adjustable Trim for various water conditions.

AT DROOP SNOOT
PART # RA1201

For high performance boats. Can add up to 5 mph.

JET TRIM
PART # JTA8507

Adjustable Trim. Will fit all jet drives.

SDR
PART # SRK2101

Increased reverse thrust. Uses a single lever shifter.

BEST
PART # BNA1407

Excellent reverse. Will not sand lock reverse bucket.

BERKELEY STYLE
PART # RA1707

Standard steering on AT-309 & SD-309 Jets.

HTR
PART # RA1701

Optional insertable steering on AT-309 & SD-309 Jets.

AMERICAN TURBINE

ATTENTION!!

There are two styles of nozzle housings for the HTR II. Verify which one you have by the pictures below.

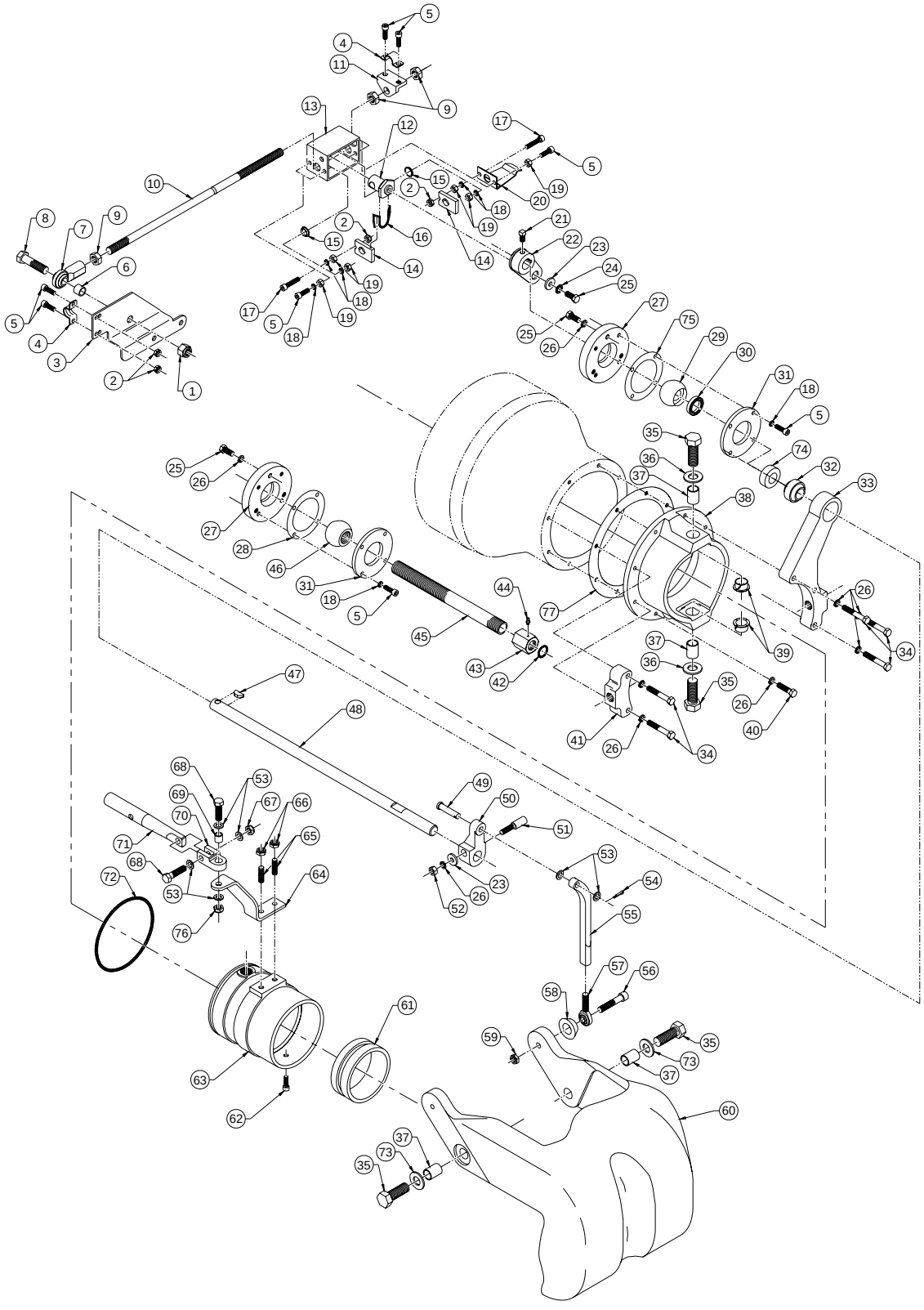
R1007

R6101

AMERICAN TURBINE

HTR II STEERING (W / R1007)

PART # RSK2101



AMERICAN TURBINE

HTR II STEERING (W / R1007)

PART # RSK2101

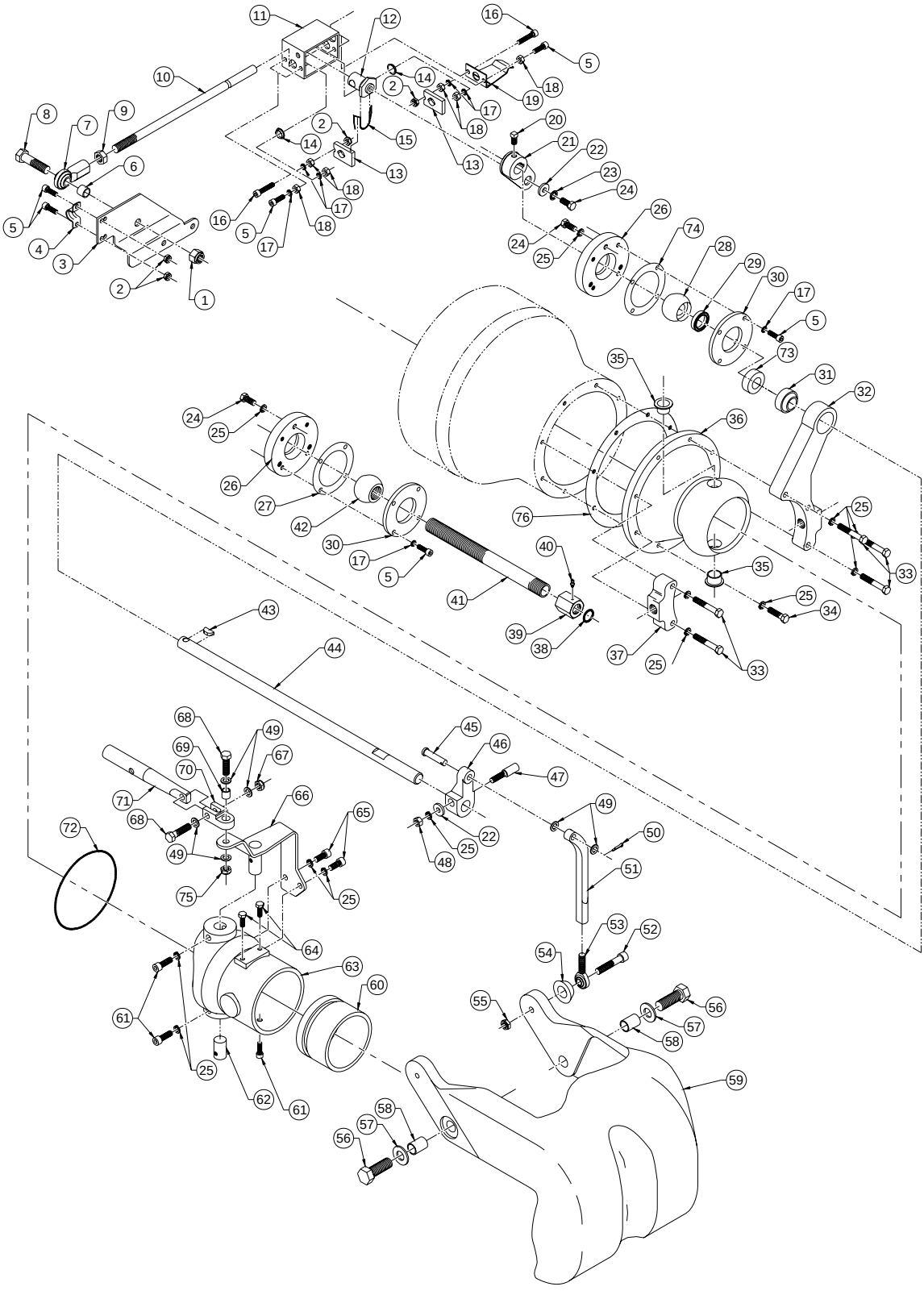
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	LOCK NUT, 1/2-13	1	F08 13 LN
2	LOCK NUT, 1/4-20	4	F04 20 LN
3	CONTROL ROD BRACKET	1	RS1001
4	64 SERIES CABLE CLAMP	1	RS5801
5	SHCS, 1/4-20 X 7/8	12	F04 20 07 SH
6	PLASTIC BUSHING	1	BN2010
7	FEMALE ROD END, 1/2-20	1	F08 20 FRE
8	HHCS, 1/2-13 X 1-3/4	1	F08 13 14 HH
9	JAMB NUT, 1/2-20	3	F08 20 JN
10	BRAKE ROD	1	RS5101
11	CABLE BRACKET	1	RS6101
12	LOCK HUB	1	RS3101
13	LOCK HOUSING	1	RS2901
14	LOCK PLATE	2	RS3001
15	NYLINER BEARING	2	RS3201
16	LOCK BLOCK SPRING	1	RS2802
17	SHCS, 1/4-20 X 1-3/8	2	F04 20 11 SH
18	LOCK WASHER, 1/4	13	F04 LW
19	HEX NUT, 1/4-20	6	F04 20 HN
20	DETENT SPRING	1	RS2701
21	SHCS, 5/16-18 X 1/2	1	F05 18 04 SH
22	LEVER ARM (SHIFT SHAFT)	1	RS5201
23	THICK WASHER, 5/16	2	F05 TW
24	STAR LOCK WASHER, 5/16	1	F05 SW
25	HHCS, 5/16-18 X 3/4	7	F05 18 06 HH
26	LOCK WASHER, 5/16	15	F05 LW
27	BEZEL (SHIFT ROD / STEERING)	2	RS5001
28	GASKET	1	G4001
29	SHIFT ROD BALL	1	RS5621
30	SHIFT ROD SEAL	1	RS5601
31	BALL FLANGE	2	T2701
32	SPERICAL BEARING	1	RS5351
33	PIVOT BRACKET (STARBOARD)	1	RS2201
34	HHCS, 5/16-18 X 2-1/4	5	F05 18 18 HH
35	HHCS, 5/8-11 X 1-3/4	4	F10 11 14 HH
36	THICK WASHER, 5/8	2	F10 TW
37	BUSHING (BUCKET PIVOT)	4	RS2131
38	NOZZLE HOUSING	1	R1007
39	NYLINER BEARING	2	B2007
40	HHCS, 5/16-18 X 1-1/4	3	F05 18 10 HH
41	PIVOT BRACKET (PORT)	1	RS2501
42	O-RING, STEERING CABLE SEAL	1	O3501
43	STEERING TUBE SEAL	1	T3107
44	GREASE ZERK	1	M4801
45	STEERING TUBE	1	T3007
46	STEERING TUBE BALL	1	T2601
47	WOODRUFF KEY	1	R5507
48	SHIFT SHAFT	1	RS5221
49	CLEVIS PIN, 3/8	1	F06 CL
50	REVERSE LEVER ARM	1	RS2401
51	TAPER PIN	1	RS3501
52	HEX NUT, 5/16-18	1	F05 18 HN
53	AN FLAT WASHER, 3/8	6	F06 AN
54	COTTER PIN, 1/8 X 1/2	1	F02 04 CP
55	PUSH PULL ROD	1	RS2301
56	SHCS, 3/8-24 X 2	1	F06 24 16 SH
57	MALE ROD END, 3/8-24	1	F06 24 MRE
58	TAPERED SLEEVE	1	RS2621
59	THIN LOCK NUT, 3/8-24	1	F06 24 TL
60	REVERSE BUCKET	1	RS2101
61	NOZZLE INSERT	1	R7370
62	SHCS, 5/16-18 X 1	1	F05 18 08 SH
63	NOZZLE, STEERING	1	R2001
64	TILLER ARM	1	RS2911
65	SET SCREW, 5/16-18 X 1-1/2	2	F05 18 12 SS
66	LOCK NUT, 5/16-18	2	F05 18 LN
67	THIN LOCK NUT, 3/8-24	1	F06 24 TL
68	HHCS, 3/8-24 X 1-1/2	2	F06 24 12 HH
69	BRONZE BUSHING 3/8 X 1/2	1	RS2623
70	CLEVIS	1	R8007
71	STEERING EXTENSION	1	R9601
72	O-RING, STEERING NOZZLE	1	O1505
73	THICK WASHER, 5/8	2	F10 TW
74	PLASTIC COLLAR	1	RS6201
75	GASKET, SHIFT SHAFT	1	G4001
76	LOCK NUT, 3/8-24	1	F06 24 LN
77	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

HTR II STEERING (W / R6101)

PART # RSK2101



AMERICAN TURBINE

HTR II STEERING (W / R6101)

PART # RSK2101

LEGEND

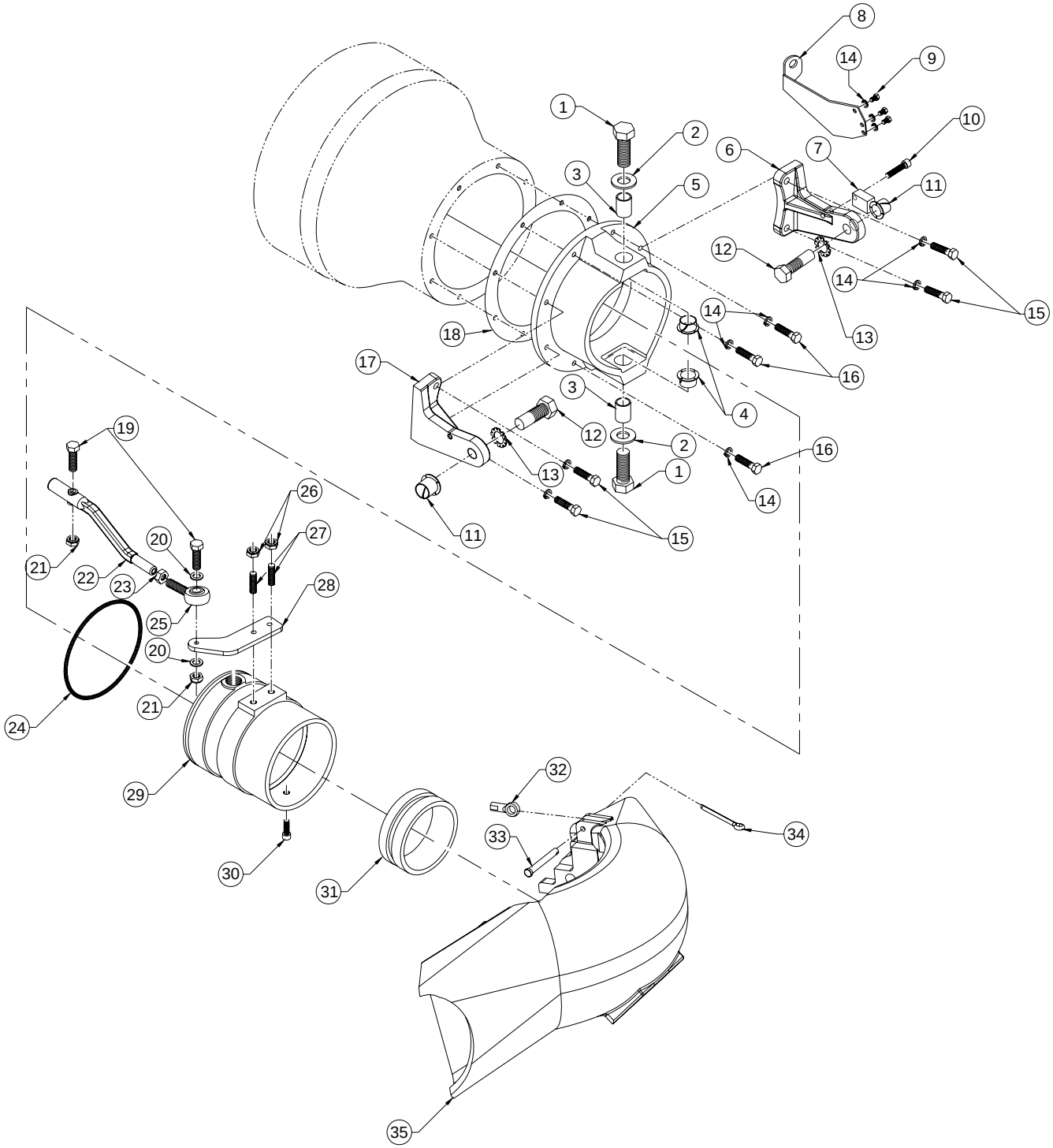
SYM.	DESCRIPTION	QTY.	PART NO.
1	LOCK NUT, 1/2-13	1	F08 13 LN
2	HEX NUT, 1/4-20	4	F04 20 HN
3	CONTROL ROD BRACKET	1	RS1001
4	64 SERIES CABLE CLAMP	1	RS5801
5	SHCS, 1/4-20 X 7/8	12	F04 20 07 SH
6	PLASTIC BUSHING	1	BN2010
7	1/2 FEMALE ROD END	1	F08 20 FRE
8	HHCS, 1/2-13 X 1-3/4	1	F08 13 14 HH
9	JAMB NUT, 1/2-20	1	F08 20 JN
10	BRAKE ROD	1	RS5101
11	LOCK HOUSING	1	RS2901
12	LOCK HUB	1	RS3101
13	LOCK PLATE	2	RS3001
14	NYLINER BEARING	2	RS3201
15	LOCK BLOCK SPRING	1	RS2802
16	SHCS, 1/4-20 X 1-3/8	2	F04 20 11 SH
17	LOCK WASHER, 1/4	14	F04 LW
18	HEX NUT, 1/4-20	4	F04 20 HN
19	DETENT SPRING	1	RS2701
20	SHCS, 5/16-18 X 1/2	1	F05 18 04 SH
21	LEVER ARM (SHIFT SHAFT)	1	RS5201
22	THICK WASHER, 5/16	2	F05 TW
23	STAR LOCK WASHER, 5/16	1	F05 SW
24	HHCS, 5/16-18 X 3/4	7	F05 18 06 HH
25	LOCK WASHER, 5/16	6	F05 LW
26	BEZEL (SHIFT ROD / STEERING)	2	RS5001
27	GASKET	2	G4001
28	SHIFT ROD BALL	1	RS5621
29	SHIFT ROD SEAL	1	RS5601
30	BALL FLANGE	2	T2701
31	SPERICAL BEARING	1	RS5351
32	PIVOT BRACKET (STARBOARD)	1	RS2201
33	HHCS, 5/16-18 X 2-1/4	5	F05 18 18 HH
34	HHCS, 5/16-18 X 1-1/4	3	F05 18 10 HH
35	NYLON BEARING	2	B2201
36	SHORT SNOOT	1	R6101
37	PIVOT BRACKET (PORT)	1	RS2501
38	O-RING, STEERING CABLE SEAL	1	O3501

SYM.	DESCRIPTION	QTY.	PART NO.
39	STEERING TUBE SEAL	1	T3107
40	GREASE ZERK	1	M4801
41	STEERING TUBE	1	T3007
42	STEERING TUBE BALL	1	T2601
43	WOODRUFF KEY	1	R5507
44	SHIFT SHAFT	1	RS5221
45	CLEVIS PIN, 3/8	1	F06 CL
46	REVERSE LEVER ARM	1	RS2401
47	TAPER PIN	1	RS3501
48	HEX NUT, 5/16-18	1	F05 18 HN
49	FLAT WASHER, 3/8 AN	6	F06 AN
50	COTTER PIN, 1/8 X 1/2	1	F02 04 CP
51	PUSH PULL ROD	1	RS2301
52	SHCS, 3/8-24 X 2	1	F06 24 16 SH
53	MALE ROD END, 3/8-24	1	F06 24 MRE
54	TAPERED SLEEVE	1	RS2621
55	LOCK NUT, 3/8-24 (THIN)	1	F06 24 TL
56	HHCS, 5/8-11 X 1-3/4	4	F10 11 14 HH
57	THICK WASHER, 5/8	2	F10 TW
58	BUSHING (BUCKET PIVOT)	2	RS2131
59	REVERSE BUCKET	1	RS2101
60	NOZZLE INSERT	1	R70014
61	SHCS, 5/16-18X1	1	F05 18 08 SH
62	PIN, LOWER NOZZLE	1	R3701
63	NOZZLE, STEERING	1	R1101
64	HHCS, 1/4-20 X 3/4	2	F04 20 06 HH
65	SHCS, 5/16-18 X 3/4	2	F05 18 06 SH
66	TILLER ARM	1	RS2801
67	LOCK NUT, 3/8-24 (THIN)	1	F06 24 TL
68	HHCS, 3/8-24 X 1-1/2	2	F06 24 12 HH
69	BRONZE BUSHING 3/8 X 1/2	1	RS2623
70	CLEVIS	1	R8007
71	STEERING EXTENSION	1	R9601
72	O-RING, STEERING NOZZLE	1	O1401
73	PLASTIC COLLAR	1	RS6201
74	GASKET, SHIFT SHAFT	1	G4001
75	LOCK NUT, 3/8-24	1	F06 24 LN
76	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

SDR STEERING (SPLIT DUCT REVERSE)

PART # SRK2101



AMERICAN TURBINE

SDR STEERING (SPLIT DUCT REVERSE)

PART # SRK2101

LEGEND

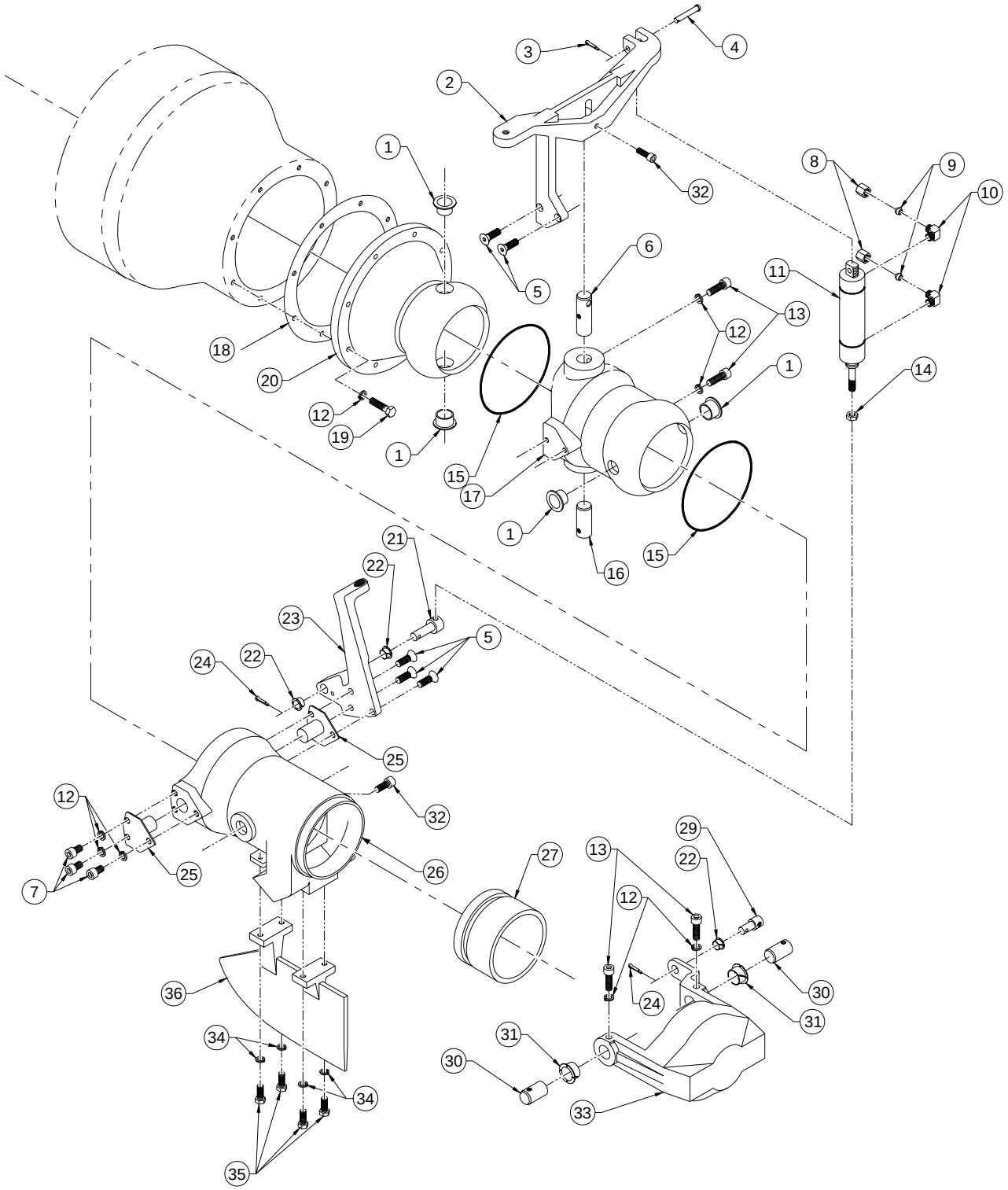
SYM.	DESCRIPTION	QTY.	PART NO.
1	HHCS, 5/8-11 X 1-3/4	2	F10 11 14 HH
2	THICK WASHER, 5/8	2	F10 TW
3	BOLT BUSHING, 5/8	2	RS2131
4	NYLINER BUSHING, 3/4	2	B2007
5	NOZZLE HOUSING	1	R1007
6	BUCKET BRACKET (RIGHT)	1	SR4001R
7	REVERSE BUCKET STOP	1	SR5101
8	SHIFT CABLE BRACKET	1	SR2005
9	HHCS, 5/16-18 X 3/4	3	F05 18 06 HH
10	SHCS, 1/4-20 X 7/8	1	F04 20 07 SH
11	1/2 X 1/2 NYLINER BUSHING	2	B2501
12	REVERSE BUCKET BOLT	2	BN2210
13	STAR LOCK WASHER, 5/8	2	F10 SW
14	LOCKWASHER, 5/16	11	F05 LW
15	HHCS, 5/16-18 X 1-3/4	4	F05 18 14 HH
16	HHCS, 5/16-18 X 1-1/4	4	F05 18 10 HH
17	BUCKET BRACKET (LEFT)	1	SR4001L
18	NOZZLE HOUSING GASKET	1	G2507

SYM.	DESCRIPTION	QTY.	PART NO.
19	HHCS, 3/8-24 X 1-1/4	2	F06 24 10 HH
20	AN FLAT WASHER, 3/8	2	F06 AN
21	3/8-24 THIN LOCK NUT	2	F06 24 TL
22	OFF-SET STEERING EXT.	1	SR6001
23	HEX NUT, 3/8-24	1	F06 24 HN
24	NOZZLE O-RING	1	O1505
25	MALE ROD END, 3/8-24	1	F06 24 MRE
26	LOCK NUT, 5/16-18	2	F05 18 LN
27	SET SCREW, 5/16-18 X 1-1/2	2	F05 18 12 SS
28	TILLER ARM	1	SR3001
29	NOZZLE	1	R2001
30	HHCS, 5/16-18 X 1	1	F05 18 10 HH
31	NOZZLE INSERT	1	R73**
32	FEMALE ROD END, 1/4-20	1	F04 20 FRE
33	CLEVIS PIN, 1/4	1	F04 CL
34	COTTER PIN, 5/64 X 3/4	1	F01 06 CP
35	REVERSE BUCKET	1	SR2101

AMERICAN TURBINE

TURBINE TRIM STEERING

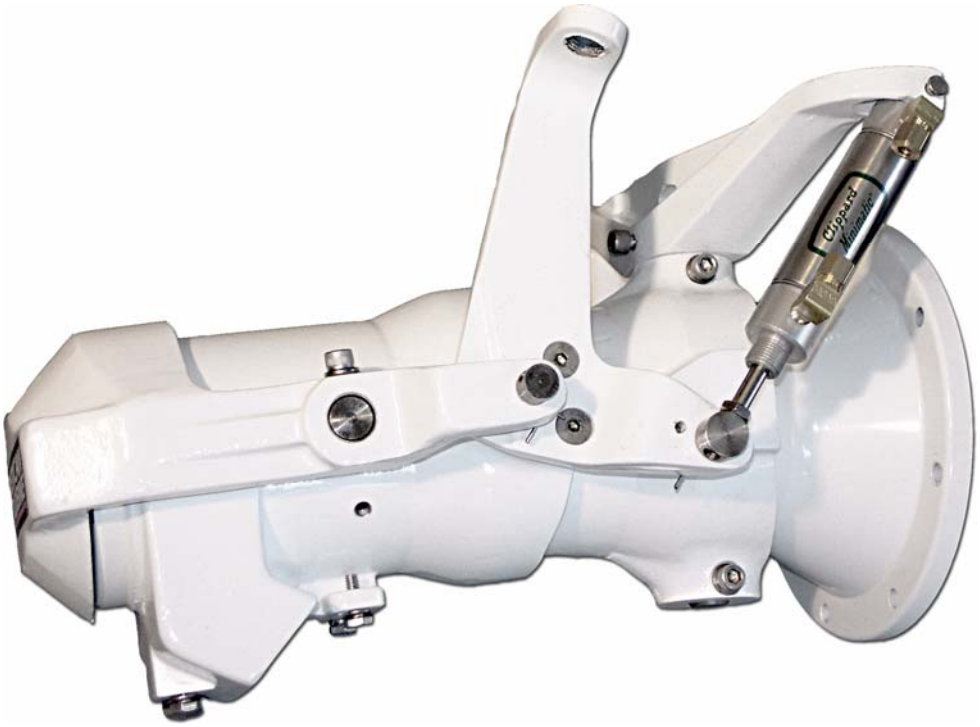
PART # RA8507



AMERICAN TURBINE

TURBINE TRIM STEERING

PART # RA8507



LEGEND

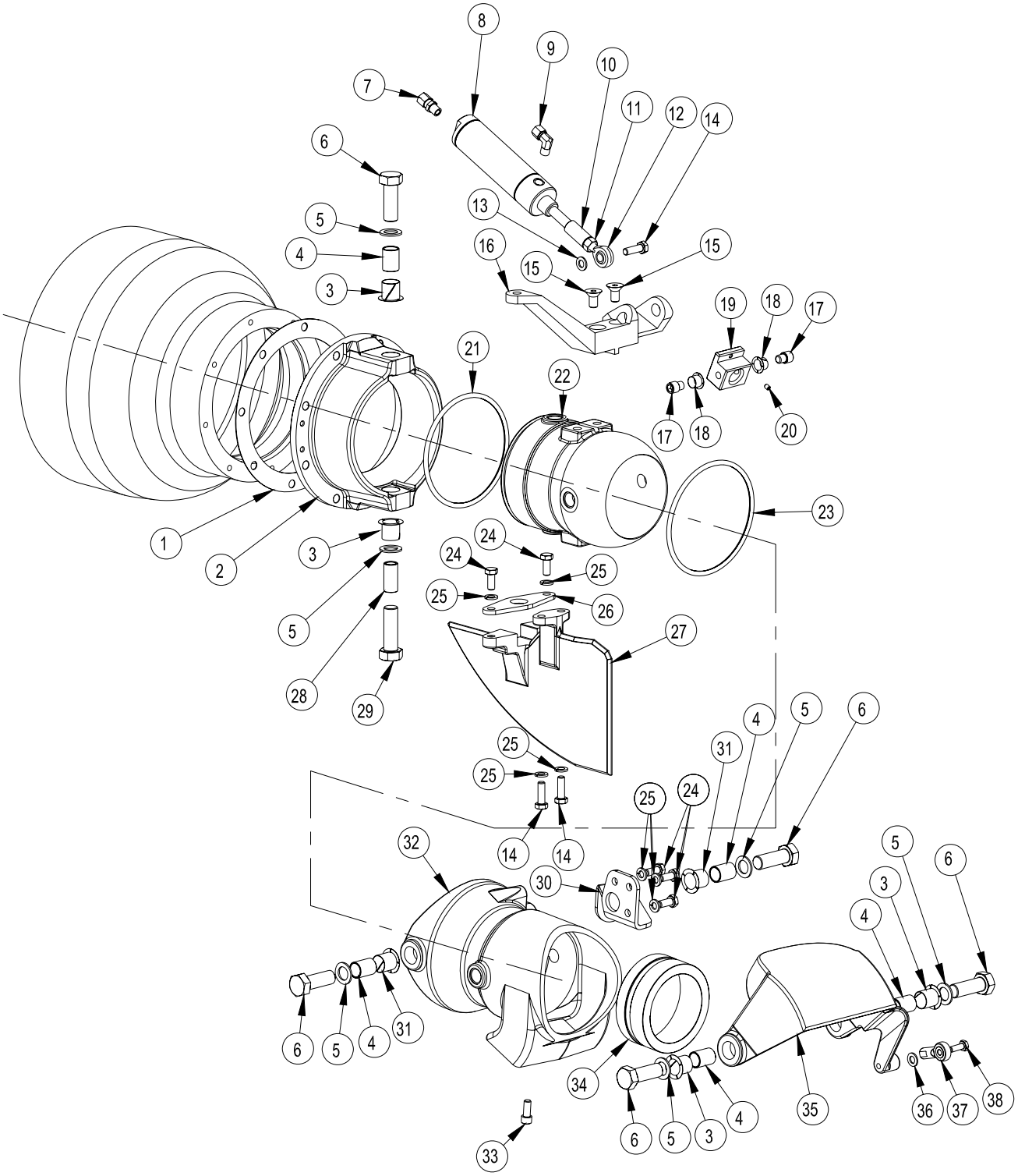
SYM.	DESCRIPTION	QTY.	PART NO.
1	BRASS BUSHING	4	B2201
2	TILLER ARM	1	R3201
3	COTTER PIN, 1/8 X 3/4	1	F02 06 CP
4	CLEVIS PIN, 1/4	1	F04 CL
5	FHMS, 5/16-18 X 1	5	F05 18 08 FH
6	UPPER TILLER PIN	1	R3601
7	SHCS, 5/16-18 X 1/2	3	F05 18 04 SH
8	BRASS FITTING	2	R8307
9	BRASS FITTING	2	R8307
10	BRASS FITTING	2	R8307
11	HYDRAULIC CYLINDER	1	R7201
12	LOCK WASHER, 5/16	15	F05 LW
13	SHCS, 5/16-18 X 1	4	F05 18 08 SH
14	5/16-24 JAMB NUT	1	F05 24 JN
15	NOZZLE O-RING	2	O1401
16	LOWER PIN	1	R3701
17	STEERING NOZZLE	1	R1401
18	NOZZLE HOUSING GASKET	1	G2507

SYM.	DESCRIPTION	QTY.	PART NO.
19	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
20	SHORT SNOOT	1	R6101
21	PIN HYDRAULIC PIVOT	1	R5201
22	3/8 NYLINER	3	B2105
23	UP /DOWN LEVER	1	R3801
24	COTTER PIN, 1/8 X 3/4	2	F02 06 CP
25	PIN, UP/DN	2	RA4701
26	NOZZLE	1	R1901
27	NOZZLE INSERT	1	R700**
29	REVERSE PIVOT PIN	1	R5005
30	REVERSE BUCKET PIN	2	R3701
31	NYLINER BUSHING 1/2	2	B2101
32	SHCS, 5/16-18 X 3/4	2	F05 18 06 SH
33	REVERSE BUCKET	1	R2101
34	LOCKWASHER, 1/4	4	F04 LW
35	HHCS, 1/4-20 X 3/4	4	F04 20 06 HH
36	RUDDER	1	R2505

AMERICAN TURBINE

JET TRIM STEERING

PART # JTA8507



AMERICAN TURBINE

JET TRIM STEERING

PART # JTA8507

LEGEND

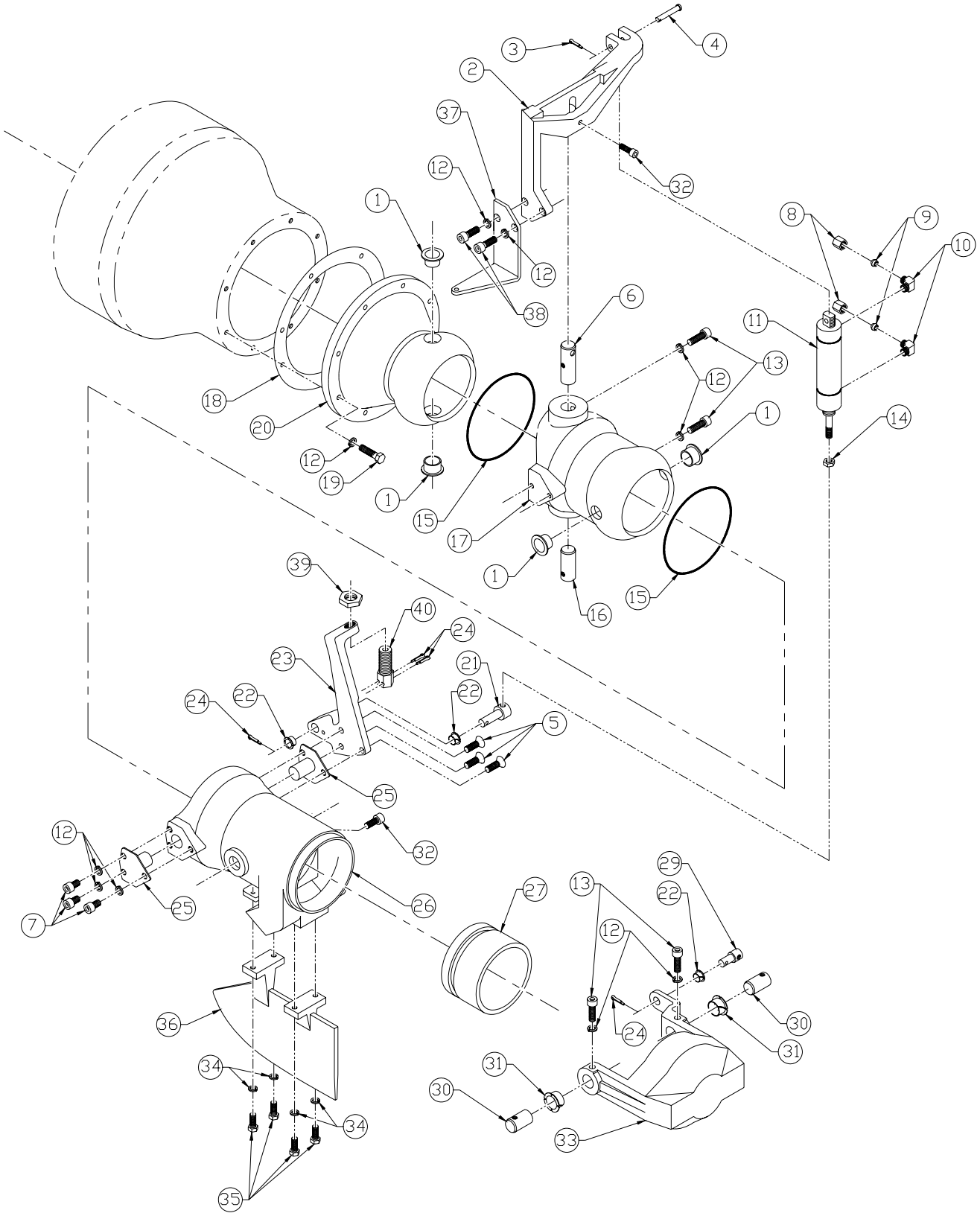
SYM.	DESCRIPTION	QTY.	PART NO.
1	NOZZLE HOUSING GASKET	1	G2507
2	NOZZLE HOUSING	1	R1007
3	NYLINER, 3/4	4	B2007
4	BOLT BUSHING	5	RS2131
5	THICK WASHER, 5/8	6	F10 TW
6	HHCS, 5/8-11 X 1-3/4	5	F10 11 14 HH
7	STRAIGHT FITTING	1	JT7311
8	HYDRAULIC CYLINDER	1	JT7211
9	90 DEGREE BRASS FITTING	1	R8307
10	STOP SLEEVE	1	JT0002
11	5/16-24 JAMB NUT	1	F05 24 JN
12	MALE ROD END, 5/16-24	1	F05 24 MRE
13	AN WASHER, 5/16	1	F05 AN
14	HHCS, 5/16-18 X 1	3	F05 18 08 HH
15	FHCS, 3/8-16 X 1-1/2	2	F06 16 12 FH
16	TILLER ARM	1	JT3111
17	SHCS, 3/8-16 X 3/8	2	F06 16 03 SH
18	NYLINER BUSHING, SPLIT	2	B2102
19	HYD. CYLINDER PIVOT BLOCK	1	JT1011

SYM.	DESCRIPTION	QTY.	PART NO.
20	10-32 X 3/8 SET SCREW	1	F03 32 03 SS
21	NOZZLE O-RING	1	O1505
22	STEERING NOZZLE		JT1411
23	ENCAPSULATED O-RING	1	O1501
24	HHCS, 5/16-18 X 3/4	5	F05 18 06 HH
25	LOCKWASHER, 5/16	7	F05 LW
26	RUDDER PIVOT BRACKET	1	JT0005
27	RUDDER	1	JT2401
28	LOWER PIVOT BUSHING	1	JT0001
29	HHCS, 5/8-11 X 2	1	F10 11 16 HH
30	REVERSE CABLE BRACKET	1	JT0004
31	NYLINER BUSHING, 1/2 LONG	2	B2101
32	NOZZLE	1	JT1911
33	SHCS, 5/16-18 X 3/4	1	F05 18 06 SH
34	NOZZLE INSERT	1	R73**
35	REVERSE BUCKET	1	JT2111
36	AN WASHER, 1/4	1	F04 AN
37	FEMALE ROD END, 1/4-28	1	F04 28 FRE
38	HHCS, 1/4-20 X 1	1	F04 20 08 HH

AMERICAN TURBINE

FW-309 TURBINE TRIM STEERING

PART # RA8507



AMERICAN TURBINE

FW-309 TURBINE TRIM STEERING

PART # RA8507

LEGEND

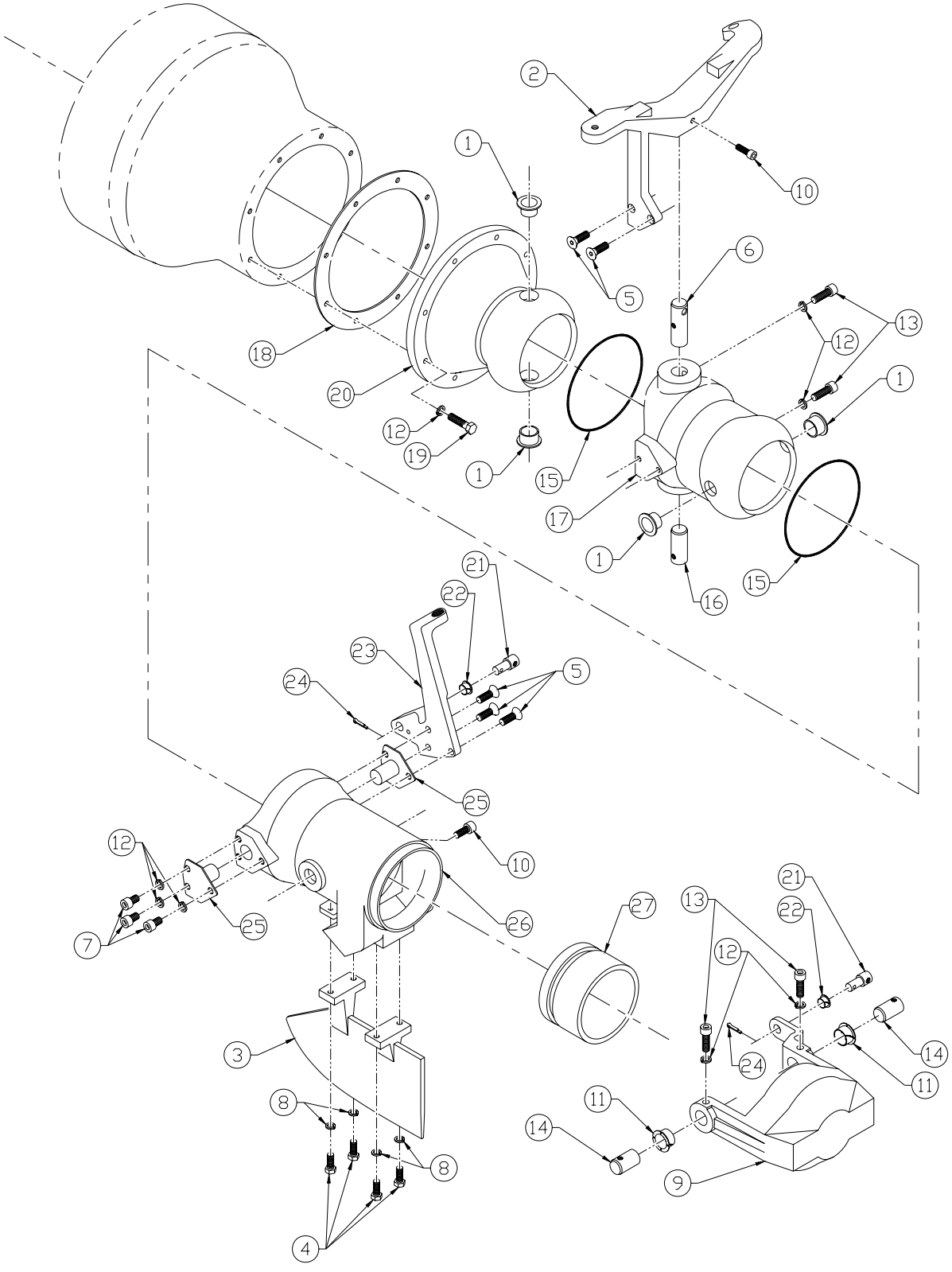
SYM.	DESCRIPTION	QTY.	PART NO.
1	BRASS BUSHING	4	B2201
2	TILLER ARM	1	R3201
3	COTTER PIN, 1/8 X 3/4	1	F02 06 CP
4	CLEVIS PIN, 1/4	1	F04 CL
5	FHMS, 5/16-18 X 1	3	F05 18 08 FH
6	UPPER TILLER PIN	1	R3601
7	SHCS, 5/16-18 X 1/2	3	F05 18 04 SH
8	BRASS FITTING	2	R8307
9	BRASS FITTING	2	R8307
10	BRASS FITTING	2	R8307
11	HYDRAULIC CYLINDER	1	R7201
12	LOCK WASHER, 5/16	17	F05 LW
13	SHCS, 5/16-18 X 1	4	F05 18 08 SH
14	5/16-24 JAMB NUT	1	F05 24 JN
15	NOZZLE O-RING	2	O1401
16	LOWER PIN	1	R3701
17	STEERING NOZZLE	1	R1401
18	NOZZLE HOUSING GASKET	1	G2507
19	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
20	SHORT SNOOT	1	R6101

SYM.	DESCRIPTION	QTY.	PART NO.
21	PIN HYDRAULIC PIVOT	1	R5201
22	3/8 NYLINER	3	B2105
23	UP /DOWN LEVER	1	R3801
24	COTTER PIN, 1/8 X 3/4	2	F02 06 CP
25	PIN, UP/DN	2	RA4701
26	NOZZLE	1	R1901
27	NOZZLE INSERT	1	R700**
29	REVERSE PIVOT PIN	1	R5108
30	REVERSE BUCKET PIN	2	R3701
31	NYLINER BUSHING 1/2	2	B2101
32	SHCS, 5/16-18 X 3/4	2	F05 18 06 SH
33	REVERSE BUCKET	1	R2101
34	LOCKWASHER, 1/4	4	F04 LW
35	HHCS, 1/4-20 X 3/4	4	F04 20 06 HH
36	RUDDER	1	R2505
37	TILLER BRACKET	1	R3401
38	SHCS, 5/16-18 X 1-1/4	2	F05 18 10 SH
39	JAMB NUT, 3/4-16	1	F12 16 JN
40	CABLE ADAPTER	1	R9208

AMERICAN TURBINE

MANUAL TURBINE TRIM STEERING

PART # RA8107



AMERICAN TURBINE

MANUAL TURBINE TRIM STEERING

PART # RA8107

LEGEND

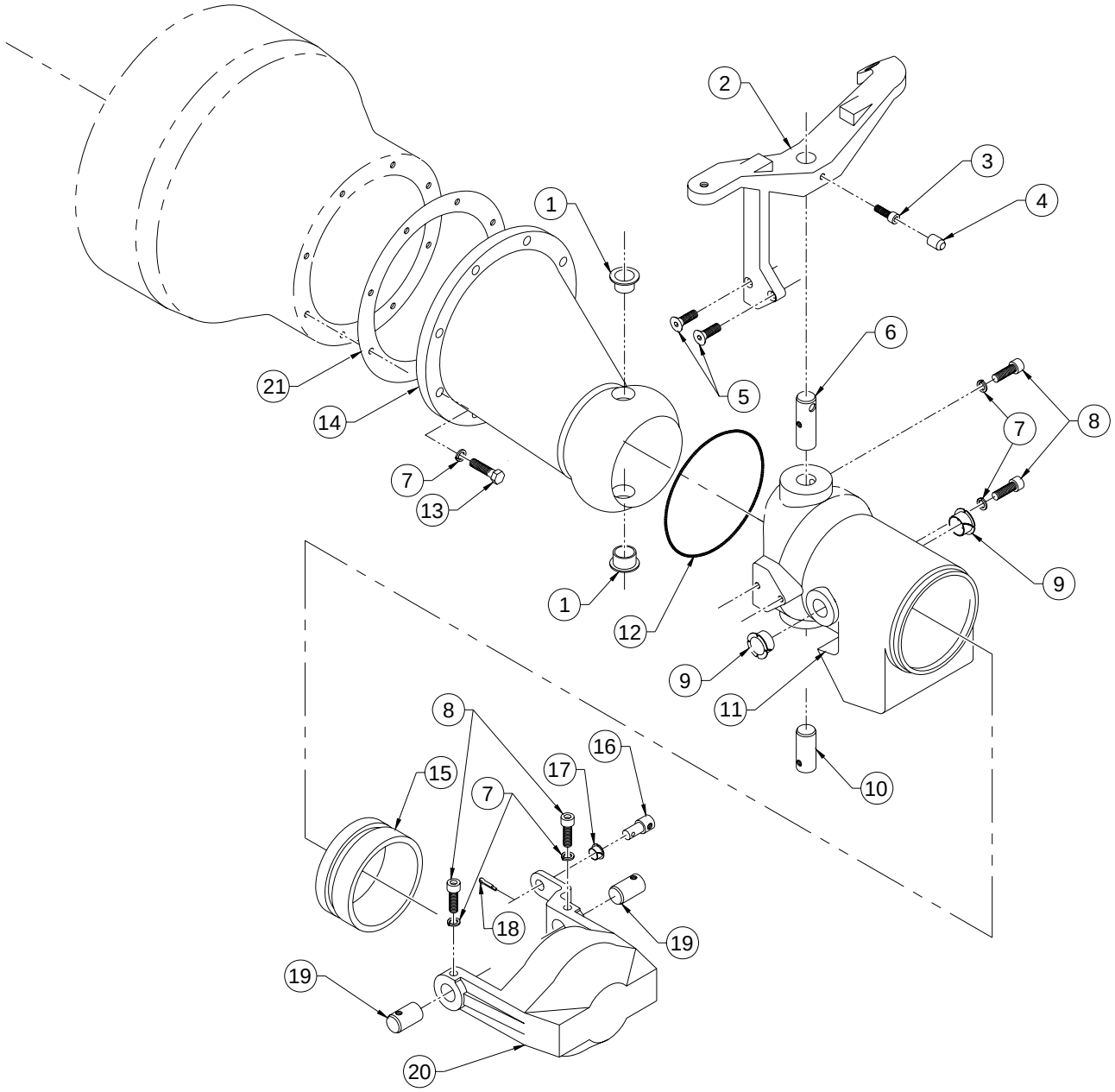
SYM.	DESCRIPTION	QTY.	PART NO.
1	BRASS BUSHING	4	B2201
2	TILLER ARM	1	R3101
3	RUDDER	1	R2505
4	HHCS, 1/4-20 X 3/4	4	F04 20 06 HH
5	FHMS, 5/16-18 X 1	5	F05 18 08 FH
6	UPPER TILLER PIN	1	R3601
7	SHCS, 5/16-18 X 1/2	3	F05 18 04 SH
8	LOCKWASHER, 1/4	4	F04 LW
9	REVERSE BUCKET	1	R2101
10	SHCS, 5/16-18 X 3/4	2	F05 18 06 SH
11	NYLINER BUSHING 1/2	2	B2101
12	LOCK WASHER, 5/16	15	F05 LW
13	SHCS, 5/16-18 X 1	4	F05 18 08 SH
14	REVERSE BUCKET PIN	2	R4601

SYM.	DESCRIPTION	QTY.	PART NO.
15	NOZZLE 0-RING	2	O1401
16	LOWER PIN	1	R3701
17	STEERING NOZZLE	1	R1401
18	NOZZLE HOUSING GASKET	1	G2507
19	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
20	SHORT SNOOT	1	R6101
21	REVERSE PIVOT PIN	1	R5005
22	NYLINER, 3/8	2	B2105
23	UP / DOWN LEVER	1	R3901
24	COTTER PIN	2	F02 06 CP
25	PIN, UP / DOWN	2	R4701
26	NOZZLE	1	R1901
27	NOZZLE INSERT	1	R700**

AMERICAN TURBINE

HIGH FLOW DROOP SNOOT STEERING

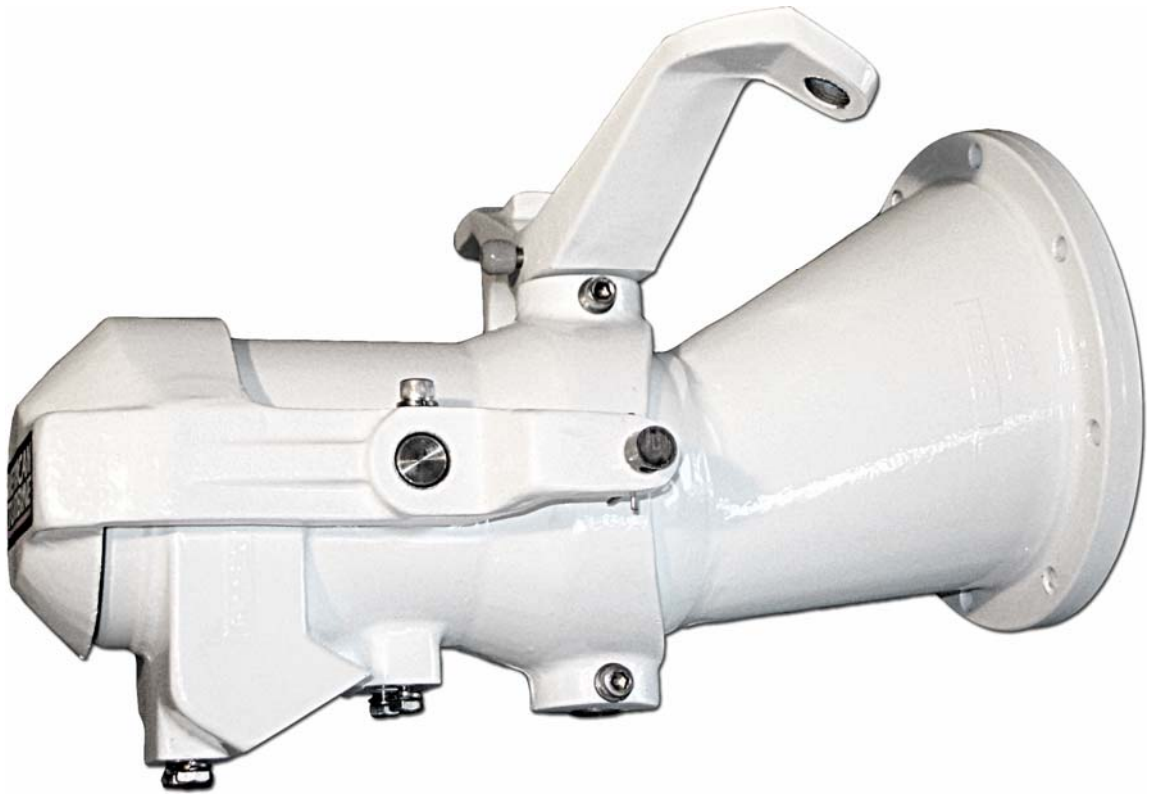
PART # RA1201



AMERICAN TURBINE

HIGH FLOW DROOP SNOOT STEERING

PART # RA1201



LEGEND

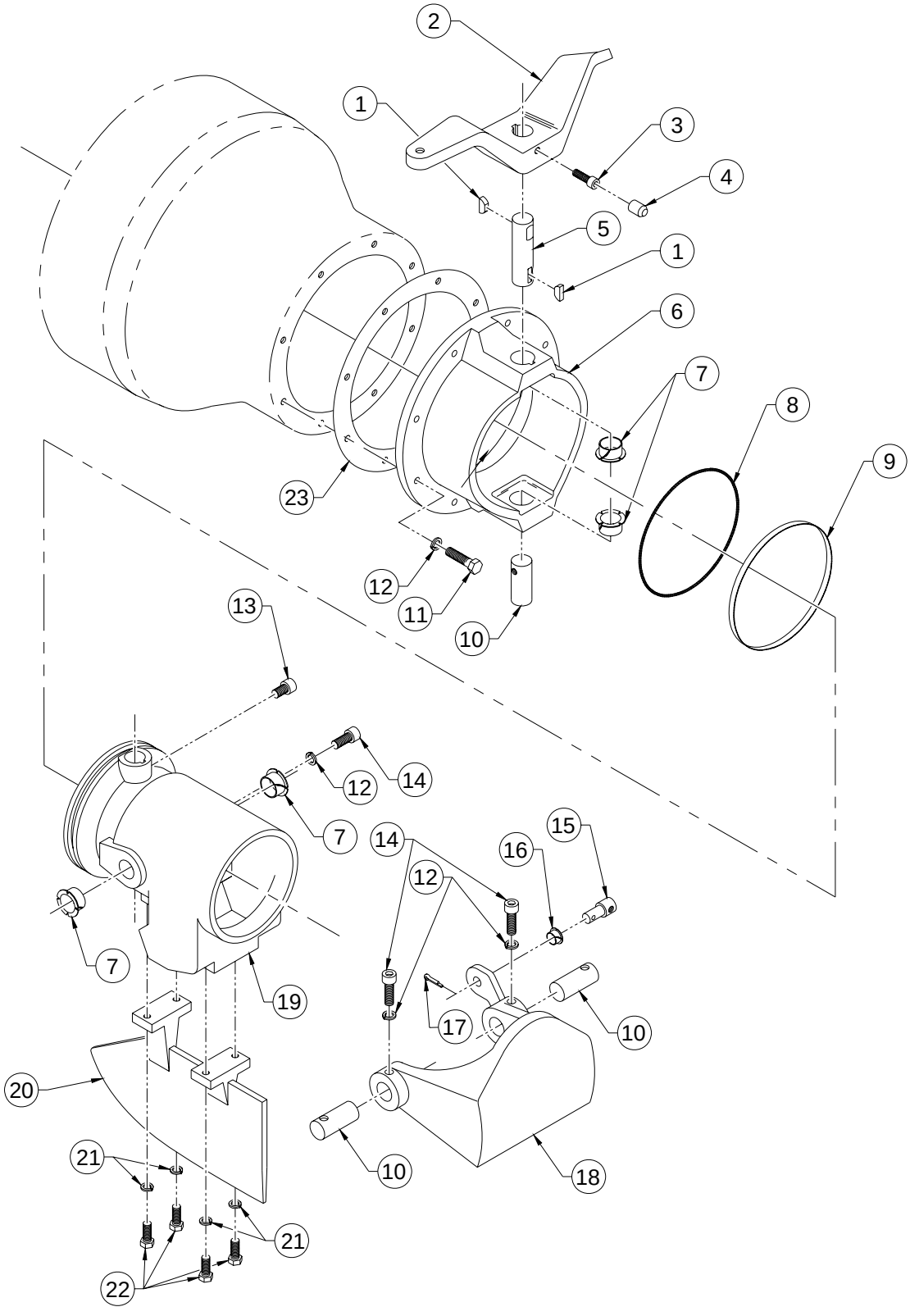
SYM.	DESCRIPTION	QTY.	PART NO.
1	BRASS BUSHING	2	B2201
2	TILLER ARM	1	R3301
3	SHCS, 5/16-18 X 3/4	1	F05 18 06 SH
4	VINYL CAP	1	M5001
5	FHMS, 5/16-18 X 1	2	F05 18 08 FH
6	UPPER STEERING PIN	1	R3601
7	LOCKWASHER, 5/16	12	F05 LW
8	SHCS, 5/16-18 X 1	4	F05 18 08 SH
9	1/2 NYLINER	2	B2101
10	LOWER STEERING PIN	1	R3701
11	NOZZLE	1	R1201

SYM.	DESCRIPTION	QTY.	PART NO.
12	NOZZLE O-RING	1	O1401
13	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
14	DROOP SNOOT HOUSING	1	R6301
15	NOZZLE INSERT	1	R710**
16	REVERSE PIVOT PIN	1	R5005
17	3/8 NYLINER	1	B2I05
18	COTTER PIN, 1/8 X 3/4	1	F02 06 CP
19	REVERSE BUCKET PIN	2	R3701
20	REVERSE BUCKET	1	R2101
21	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

DOMINATOR STEERING

PART # RA1703



AMERICAN TURBINE

DOMINATOR STEERING

PART # RA1703

LEGEND

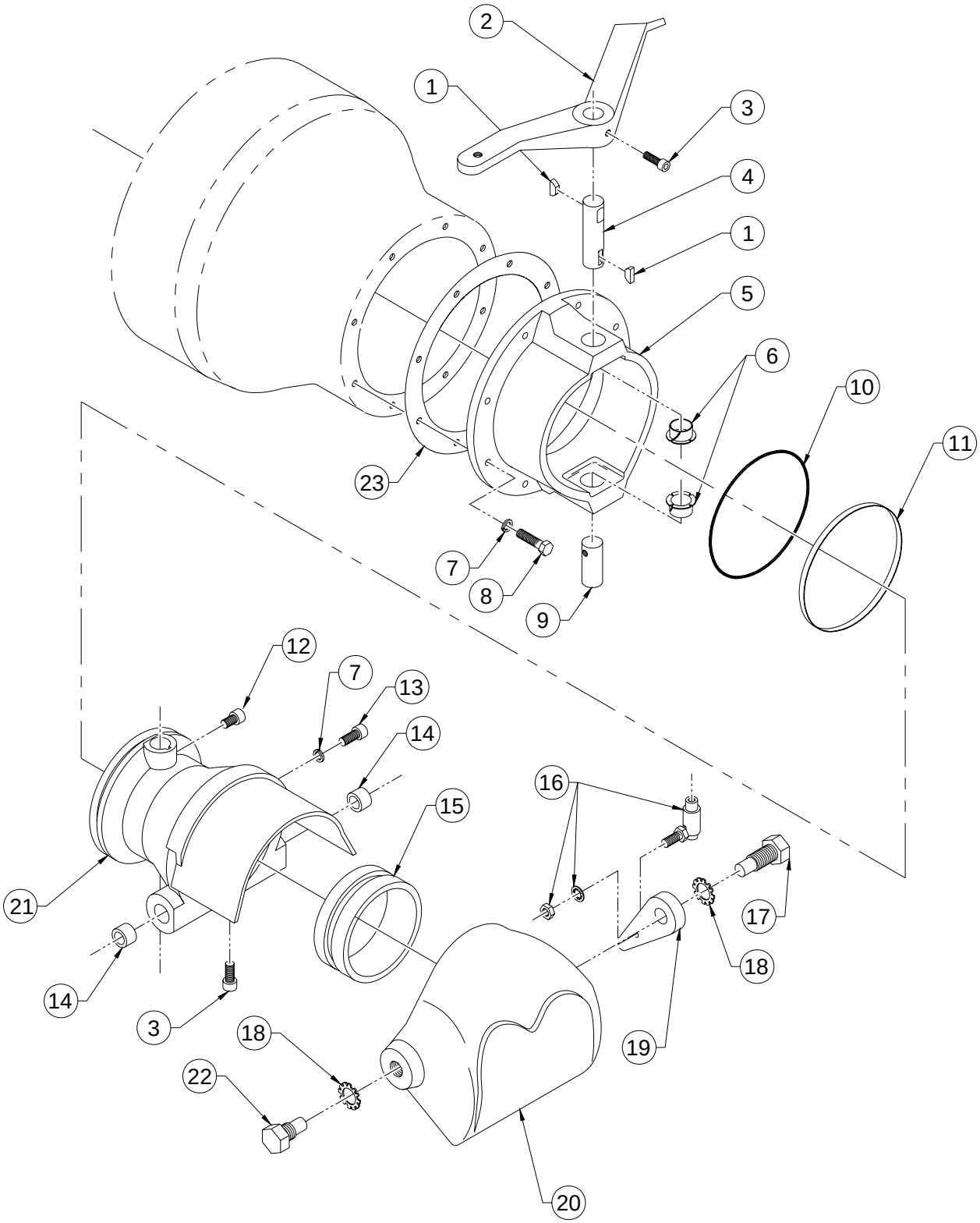
SYM.	DESCRIPTION	QTY.	PART NO.
1	WOODRUFF KEY #9	2	R5507
2	TILLER ARM	1	R3003
3	SHCS, 5/16-18 X 3/4	1	F05 18 06 SH
4	VINYL CAP	1	M5001
5	UPPER TILLER PIN	1	BN2410
6	NOZZLE HOUSING	1	R1007
7	NYLINER BEARING 3/4 X 3/4	4	B2007
8	O-RING	1	O1505
9	RUBBER BAND (OPTIONAL)	1	**
10	LOWER NOZZLE PIN	3	BN2510
11	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
12	LOCKWASHER, 5/16	11	F05 LW

SYM.	DESCRIPTION	QTY.	PART NO.
13	SHCS, 5/16-18 X 1/2	1	F05 18 04 SH
14	SHCS, 5/16-18 X 1	3	F05 18 08 SH
15	PIVOT, REVERSE CABLE	1	R5005
16	NYLINER, 3/8	1	B2105
17	COTTER PIN, 1/8 X 3/4	1	F02 06 CP
18	REVERSE BUCKET	1	R2103
19	NOZZLE	1	R1703
20	RUDDER	1	R2505
21	LOCK WASHER, 1/4	4	F04 LW
22	HHCS, 1/4-20 X 3/4	4	F04 20 06 HH
23	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

BEST STEERING

PART # BNA1407



AMERICAN TURBINE

BEST STEERING

PART # BNA1407

LEGEND

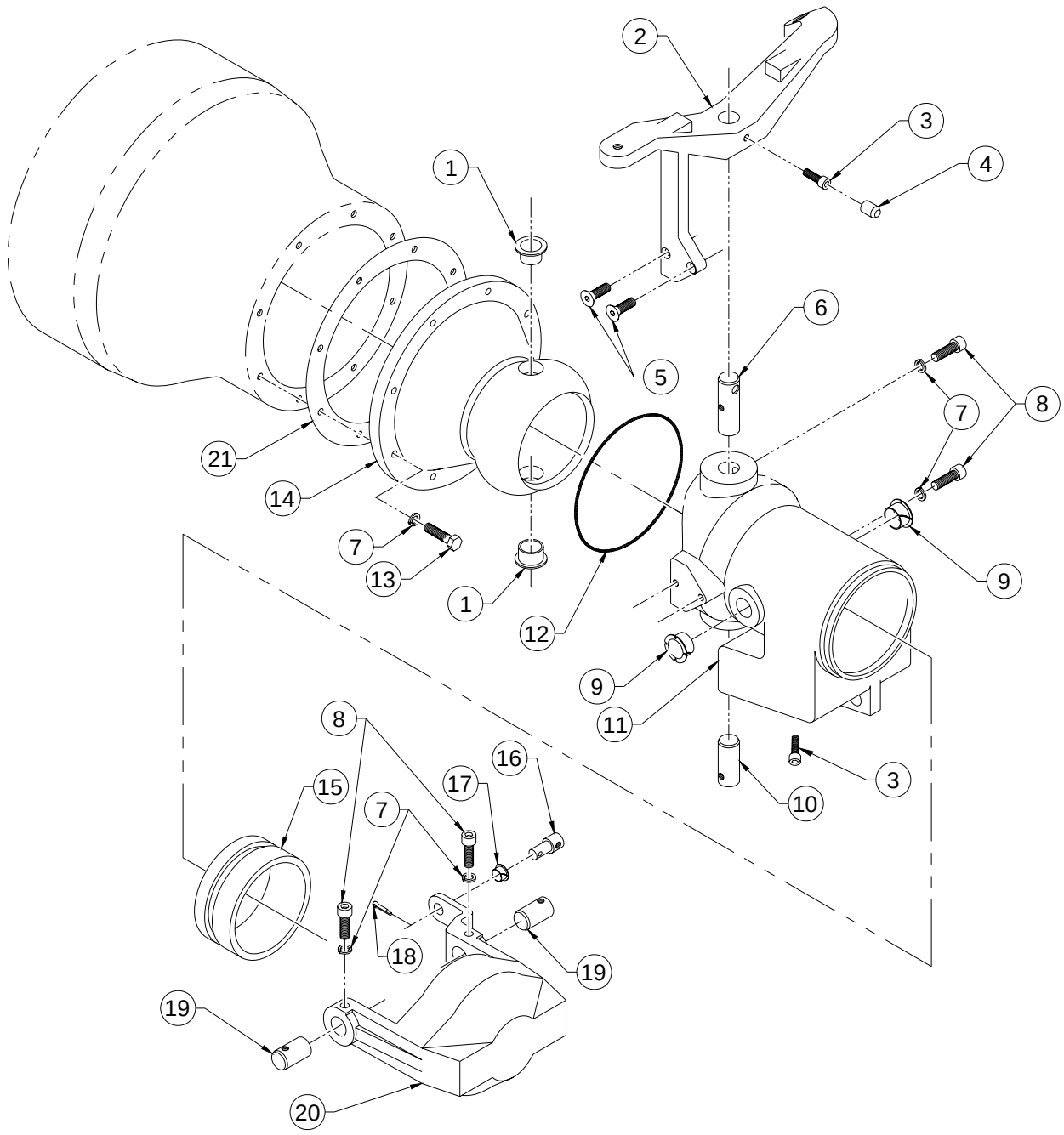
SYM.	DESCRIPTION	QTY.	PART NO.
1	WOODRUFF KEY #9	2	R5507
2	TILLER ARM	1	R3001
3	SHCS, 5/16-18 X 3/4	2	F05 18 06 SH
4	UPPER TILLER PIN	1	BN2410
5	NOZZLE HOUSING	1	R1007
6	NYLINER BEARING	2	B2007
7	LOCKWASHER, 5/16	8	F05 LW
8	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
9	LOWER PIN	1	BN2510
10	O-RING	1	O1505
11	RUBBER BAND (OPTIONAL)	1	**
12	SHCS, 5/16-18 X 1/2	1	F05 18 04 SH

SYM.	DESCRIPTION	QTY.	PART NO.
13	SHCS, 5/16-18 X 1	1	F05 18 08 SH
14	PLASTIC BUSHING	2	BN2010
15	NOZZLE INSERT	1	R710**
16	CABLE PIVOT	1	BN1910
17	RIGHT SIDE BOLT	1	BN2110
18	LOCKWASHER	2	BN2310
19	LEVER	1	BN1810
20	REVERSE BUCKET	1	BN1610
21	NOZZLE	1	BN1510
22	LEFT SIDE BOLT	1	BN2210
23	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

HTR STEERING

PART # RA1701



AMERICAN TURBINE

HTR STEERING

PART # RA1701

LEGEND

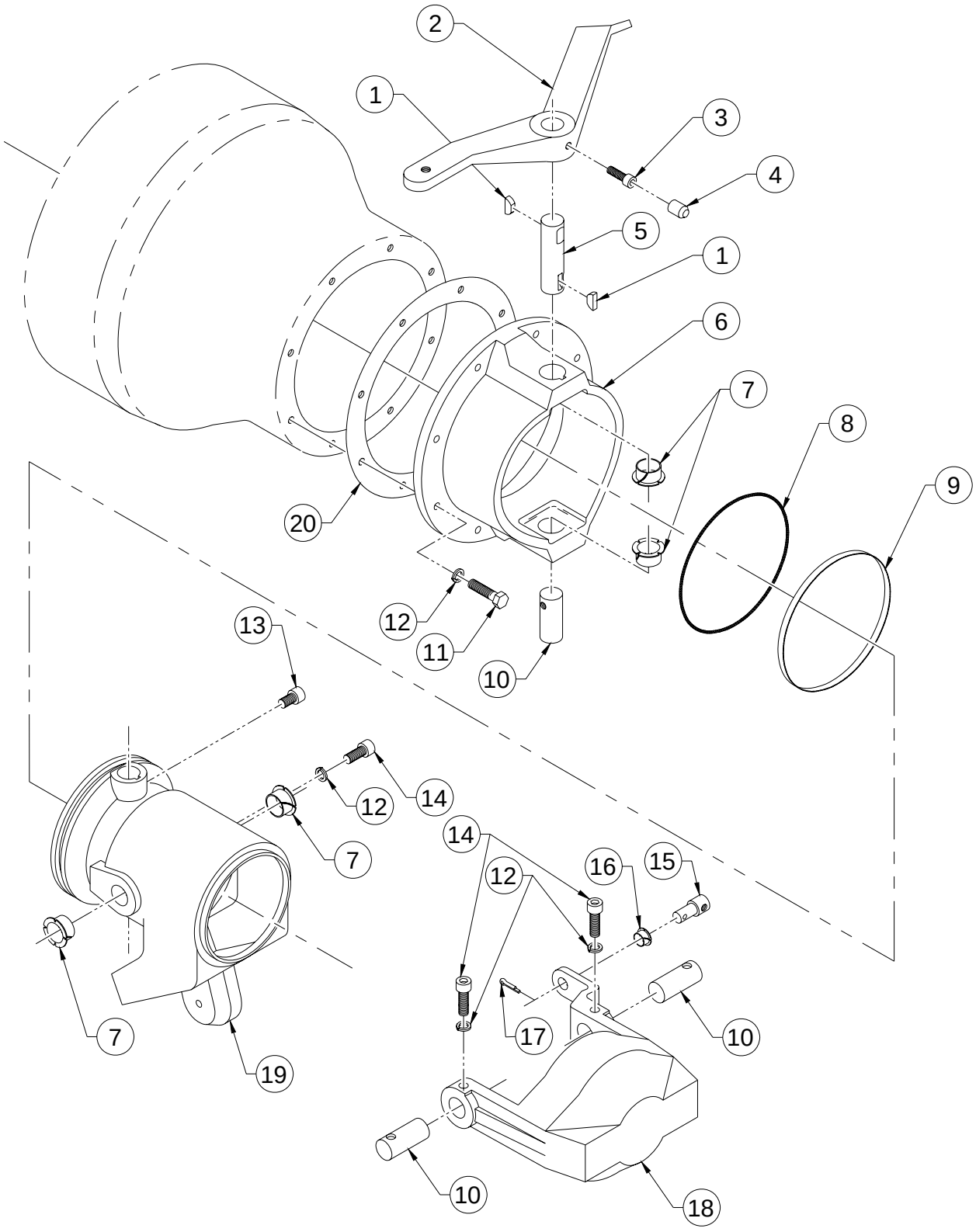
SYM.	DESCRIPTION	QTY.	PART NO.
1	BRASS BUSHING	2	B2201
2	TILLER ARM	1	R3301
3	SHCS, 5/16-18 X 3/4	2	F05 18 06 SH
4	VINYL CAP	1	M5001
5	FHMS, 5/16-18 X 1	2	F05 18 08 FH
6	UPPER STEERING PIN	1	R3601
7	LOCKWASHER, 5/16	12	F05 LW
8	SHCS, 5/16-18 X 1	4	F05 18 08 SH
9	1/2 NYLINER	2	B2101
10	LOWER STEERING PIN	1	R3701
11	NOZZLE	1	R1701

SYM.	DESCRIPTION	QTY.	PART NO.
12	NOZZLE O-RING	1	O1401
13	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
14	SHORT SNOOT	1	R6101
15	NOZZLE INSERT	1	R710**
16	REVERSE PIVOT PIN	1	R5005
17	3/8 NYLINER	1	B2I05
18	COTTER PIN, 1/8 X 3/4	1	F02 06 CP
19	REVERSE BUCKET PIN	2	R3701
20	REVERSE BUCKET	1	R2101
21	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

BERKELEY STYLE STEERING

PART # RA1707



AMERICAN TURBINE

BERKELEY STYLE STEERING

PART # R5707

LEGEND

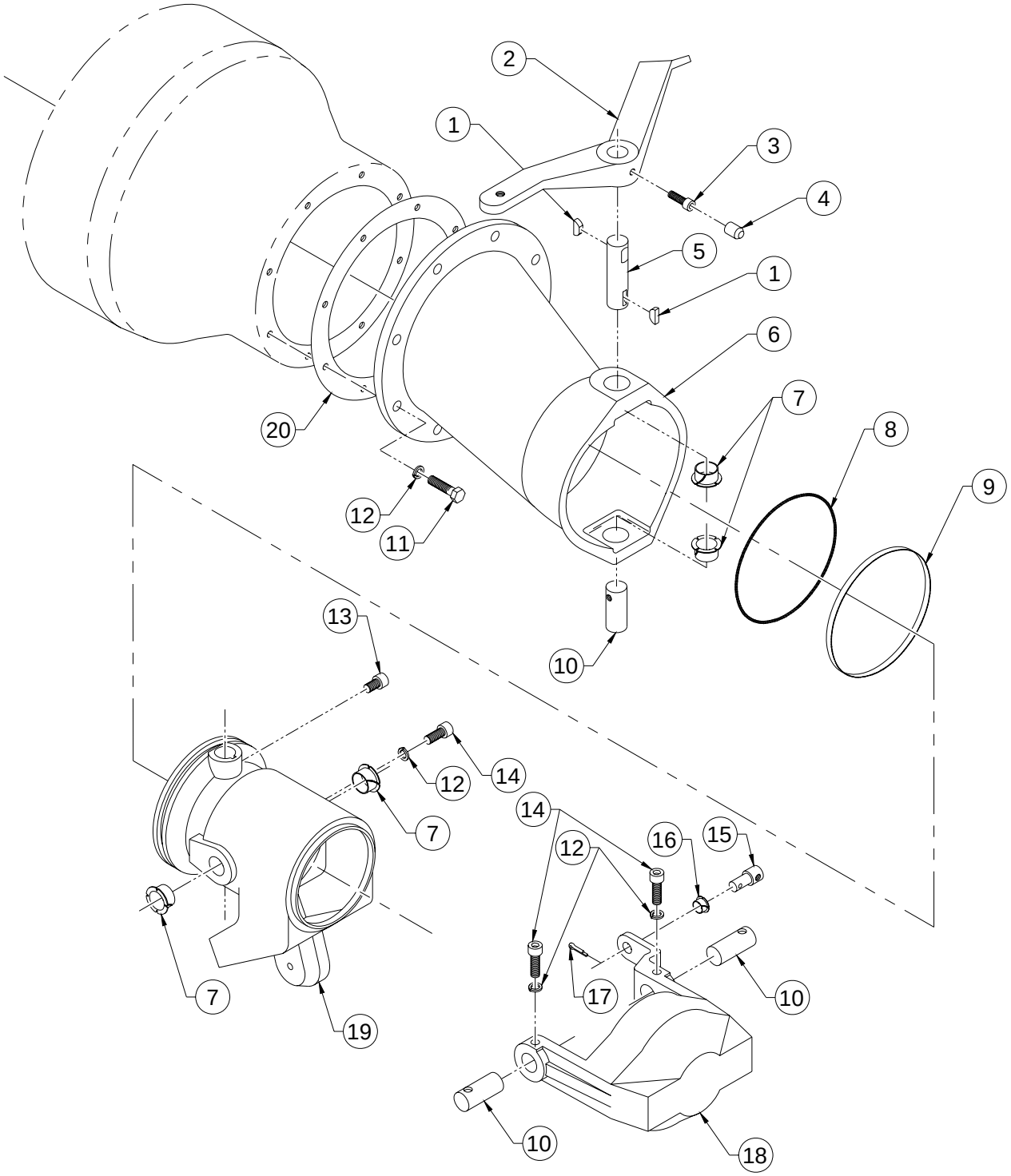
SYM.	DESCRIPTION	QTY.	PART NO.
1	WOODRUFF KEY #9	2	R5507
2	TILLER ARM	1	R3001
3	SHCS, 5/16-18 X 3/4	1	F05 18 06 SH
4	VINYL CAP	1	M5001
5	UPPER TILLER PIN	1	BN2410
6	NOZZLE HOUSING	1	R1007
7	NYLINER BEARING 3/4 X 3/4	4	B2007
8	O-RING	1	O1505
9	RUBBER BAND (OPTIONAL)	1	**
10	LOWER / REVERSE BUCKET PIN	3	BN2510

SYM.	DESCRIPTION	QTY.	PART NO.
11	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
12	LOCKWASHER, 5/16	11	F05 LW
13	SHCS, 5/16-18 X 1/2	1	F05 18 04 SH
14	SHCS, 5/16-18 X 1	3	F05 18 08 SH
15	PIVOT, REVERSE CABLE	1	R5005
16	NYLINER, 3/8	1	B2105
17	COTTER PIN, 1/8 X 3/4	1	F02 04 CP
18	REVERSE BUCKET	1	R2101B
19	NOZZLE	1	R1707
20	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

BERKELEY STYLE DROOP SNOOT STEERING

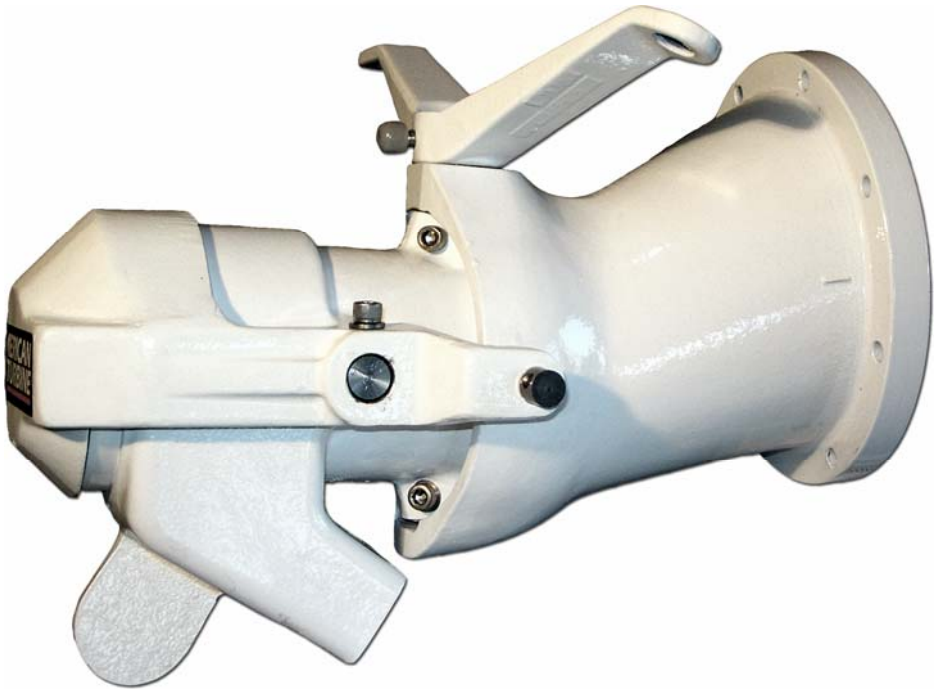
PART # R6107



AMERICAN TURBINE

BERKELEY STYLE DROOP SNOOT STEERING

PART # R6107



LEGEND

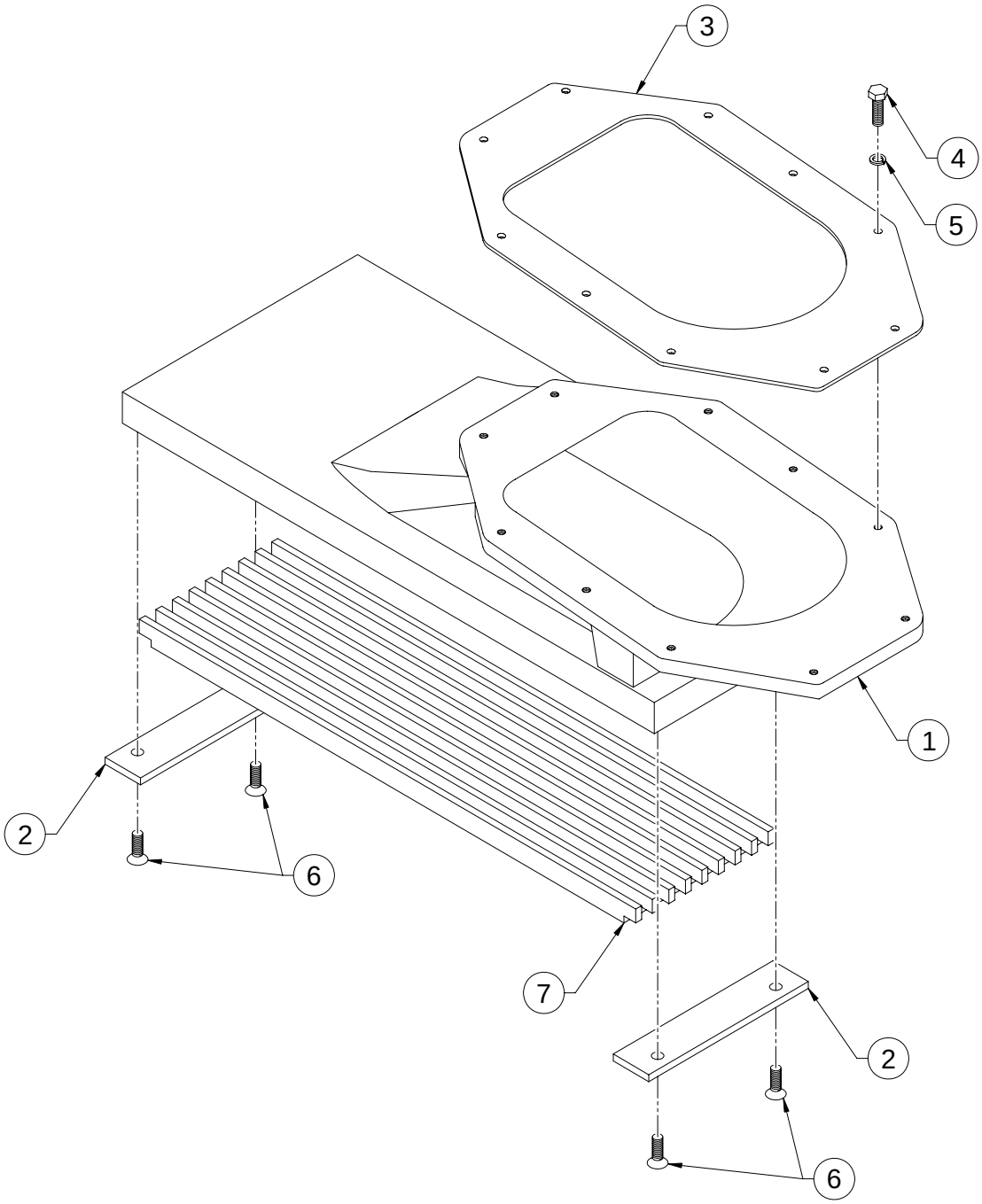
SYM.	DESCRIPTION	QTY.	PART NO.
1	WOODRUFF KEY #9	2	R5507
2	TILLER ARM	1	R3001
3	SHCS, 5/16-18 X 3/4	1	F05 18 06 SH
4	VINYL CAP	1	M5001
5	UPPER TILLER PIN	1	BN2410
6	NOZZLE HOUSING	1	R6007
7	NYLINER BEARING 3/4 X 3/4	4	B2007
8	O-RING	1	O1505
9	RUBBER BAND (OPTIONAL)	1	**
10	LOWER PIN	3	BN2510

SYM.	DESCRIPTION	QTY.	PART NO.
11	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
12	5/16 LOCKWASHER	11	F05 LW
13	SHCS, 5/16-18 X 1/2	1	F05 18 04 SH
14	SHCS, 5/16-18 X 1	3	F05 18 08 SH
15	PIVOT, REVERSE CABLE	1	R5005
16	NYLINER, 3/8	1	B2105
17	COTTER PIN, 1/8 X 3/4	1	F02 06 CP
18	REVERSE BUCKET	1	R2101B
19	NOZZLE	1	R1707
20	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

IK-1307 INTAKE (9-BAR)

ALUMINUM BOAT W / SD-309 JET



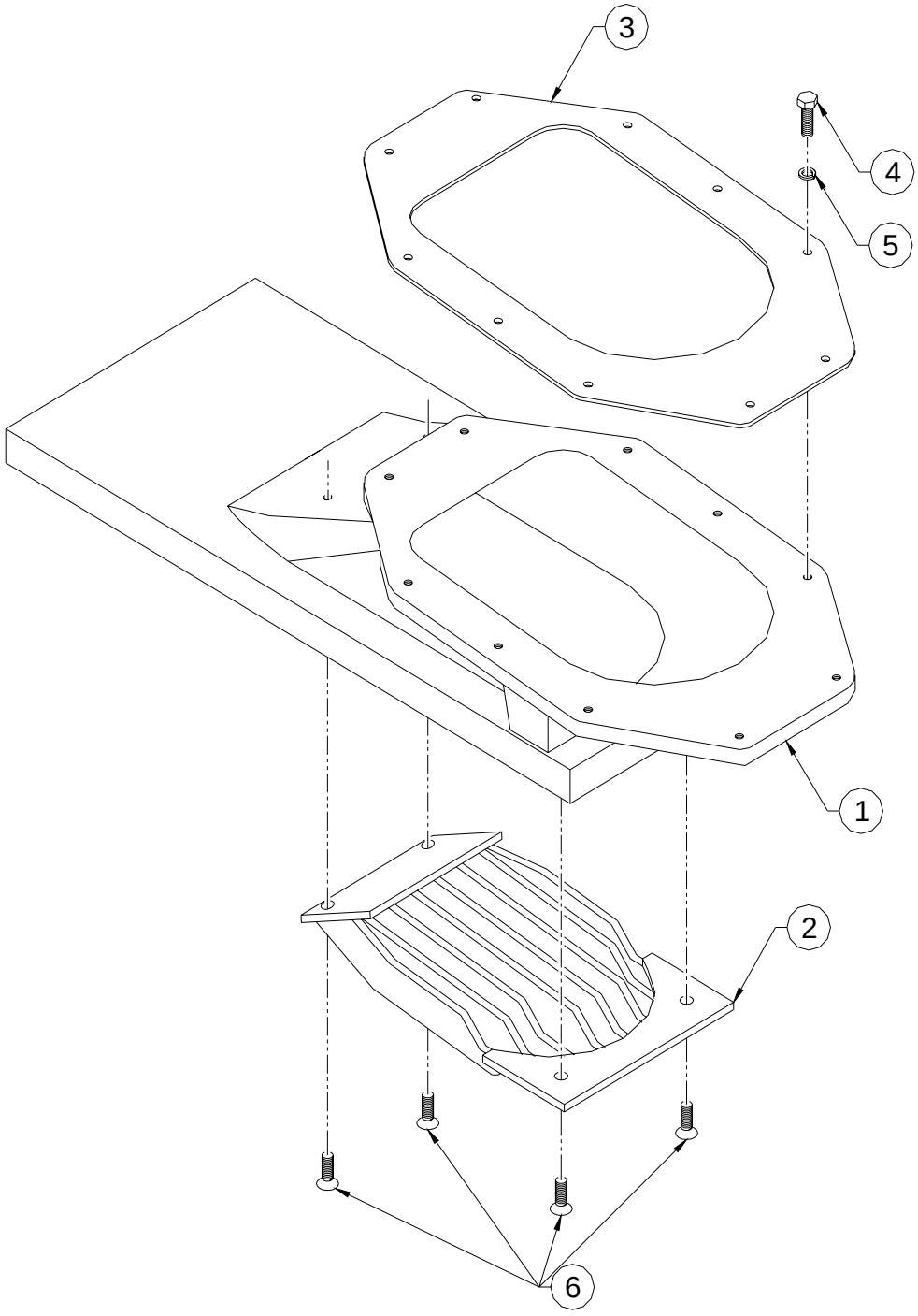
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1307
2	LOCKING BAR	2	I9003
3	GASKET	1	G1001
4	HHCS, 5/16-18 X 1-1/4	10	F05 18 10 HH

SYM.	DESCRIPTION	QTY.	PART NO.
5	LOCKWASHER, 5/16	10	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 FH
7	GRATE BARS	9	I9001

AMERICAN TURBINE

IK-1307 INTAKE (NEW STYLE)

ALUMINUM BOAT W / SD-309 JET



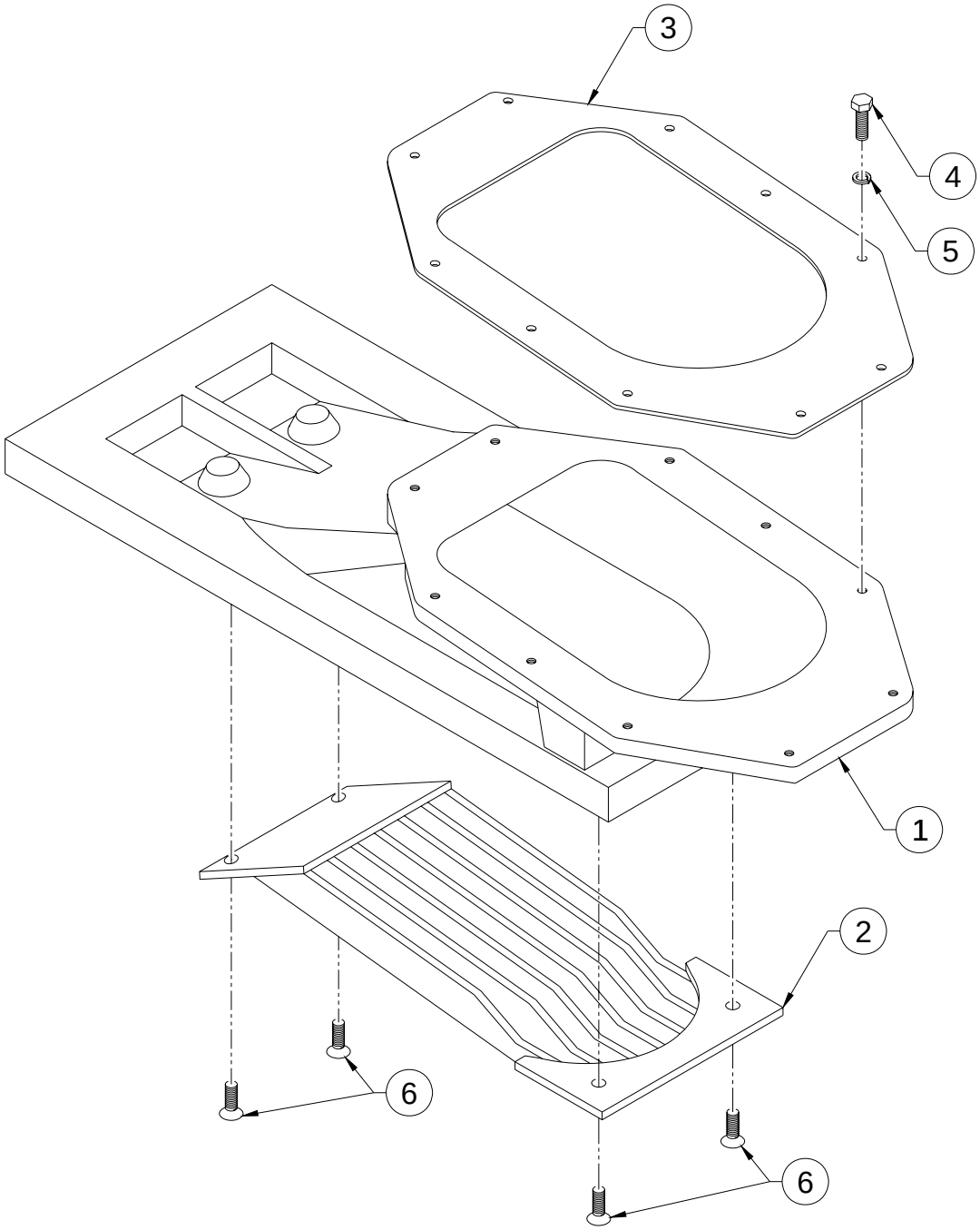
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1307
2	GRATE	1	I4108
3	GASKET	1	G1001

SYM.	DESCRIPTION	QTY.	PART NO.
4	HHCS, 5/16-18 X 1-1/4	10	F05 18 10 HH
5	LOCKWASHER, 5/16	10	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH

AMERICAN TURBINE

IK-1307 INTAKE (OLD STYLE)

ALUMINUM BOAT W / SD-309 JET



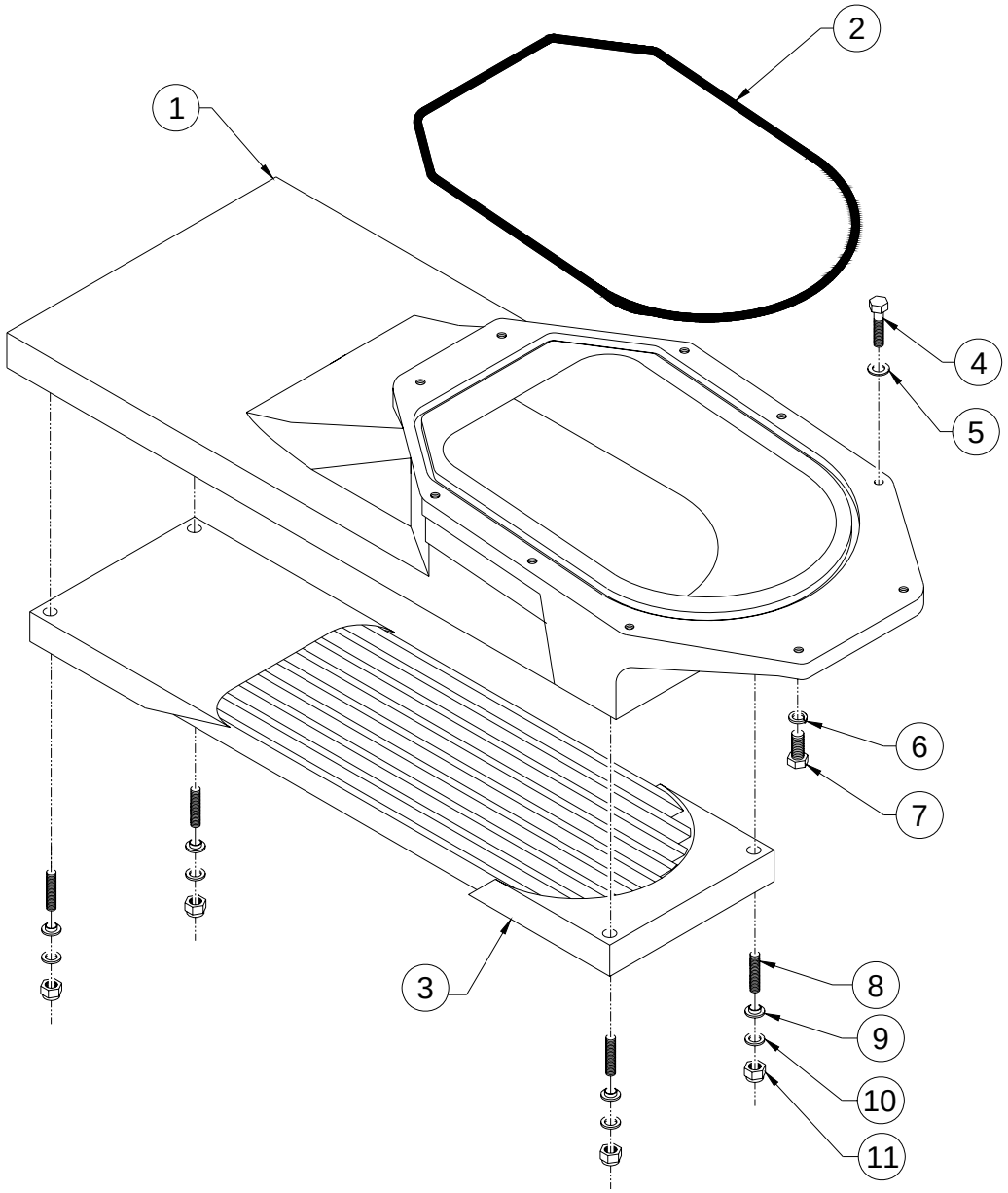
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1307
2	GRATE	1	I4107
3	GASKET	1	G1001

SYM.	DESCRIPTION	QTY.	PART NO.
4	HHCS, 5/16-18 X 1-1/4	10	F05 18 10 HH
5	LOCKWASHER, 5/16	10	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH

AMERICAN TURBINE

IK-1401 INTAKE

ALUMINUM BOAT W / SD-312 JET



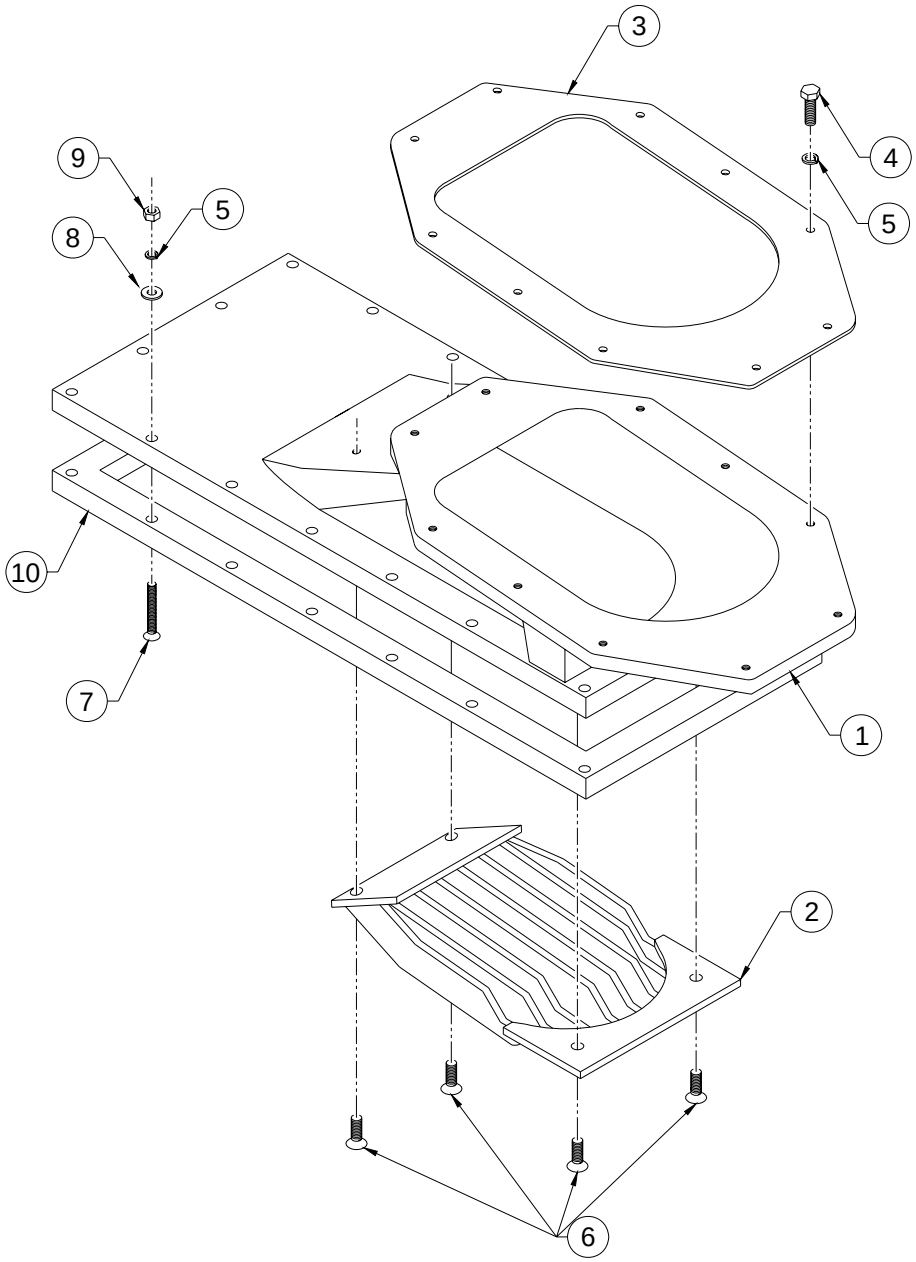
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1401
2	O-RING	1	O3901
3	GRATE	1	I4401
4	HHCS, 5/16-18 X 1-1/4	8	F05 18 10 HH
5	LOCKWASHER, 5/16	8	F05 LW
6	LOCKWASHER, 5/16	2	F05 LW

SYM.	DESCRIPTION	QTY.	PART NO.
7	HHCS, 5/16-18 X 1	2	F05 18 08 HH
8	SET SCREW, 5/16-18 X 1-1/2	4	F05 18 12 SS
9	PLASTIC BUSHING	4	M4301
10	LOCKNUT, 5/16-18	4	F05 18 LN
11	AN WASHER, 5/16	4	F05 AN

AMERICAN TURBINE

IK-1407 INTAKE (NEW STYLE)

ALUMINUM BOAT W / AT-309 JET



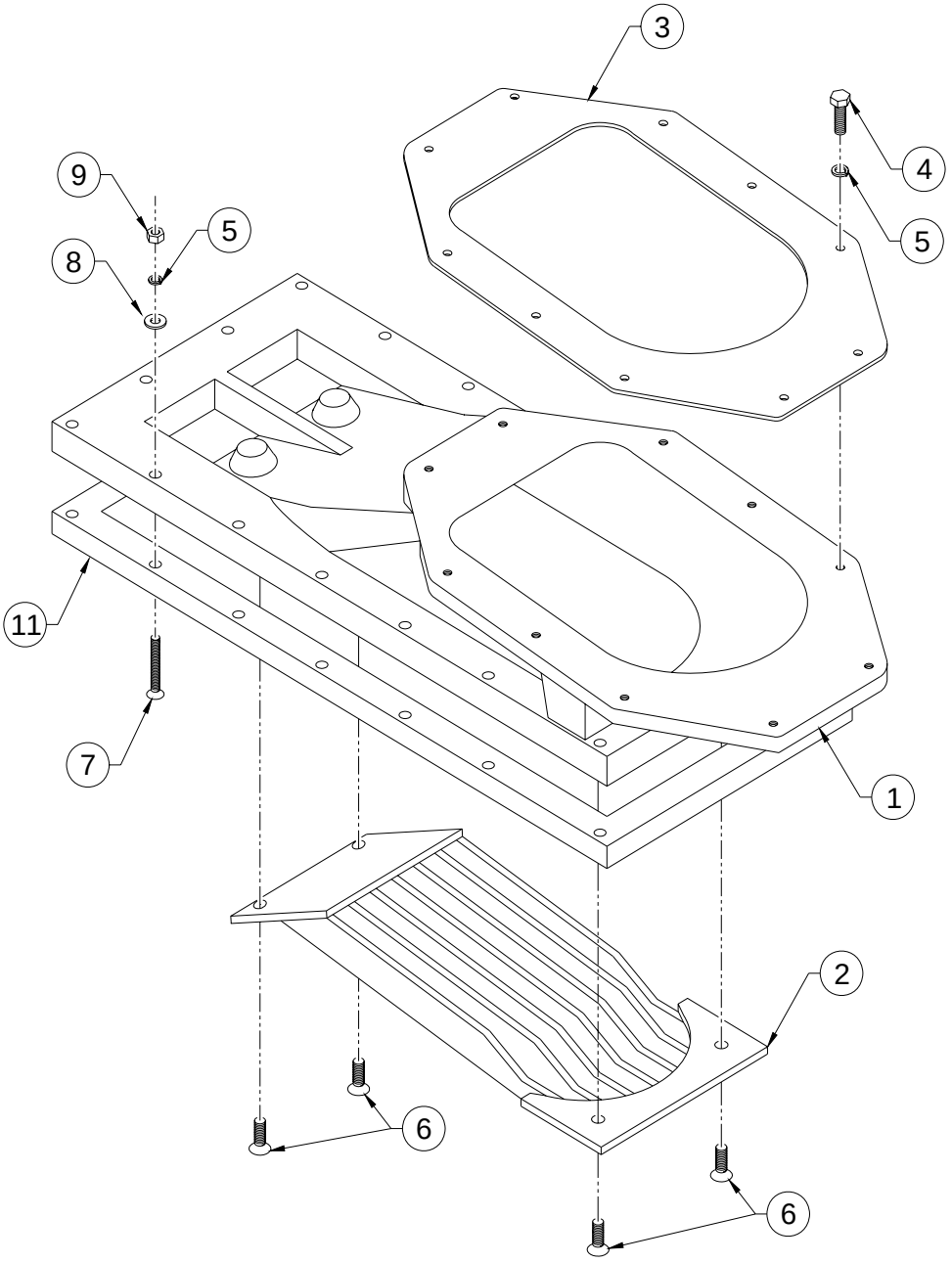
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1407
2	GRATE	1	I4108
3	GASKET	1	G1001
4	HHCS, 5/16-18 X 1-1/4	10	F05 18 10 HH
5	LOCKWASHER, 5/16	26	F05 LW

SYM.	DESCRIPTION	QTY.	PART NO.
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH
7	FHMS, 5/16-18 X 2	16	F05 18 16 FH
8	NEOBOND WASHER, 5/16	16	F05 NW
9	HEX NUT, 5/16-18	16	F05 18 HN
10	GASKET	1	G5001

AMERICAN TURBINE

IK-1407 INTAKE (OLD STYLE)

ALUMINUM BOAT W / AT-309 JET



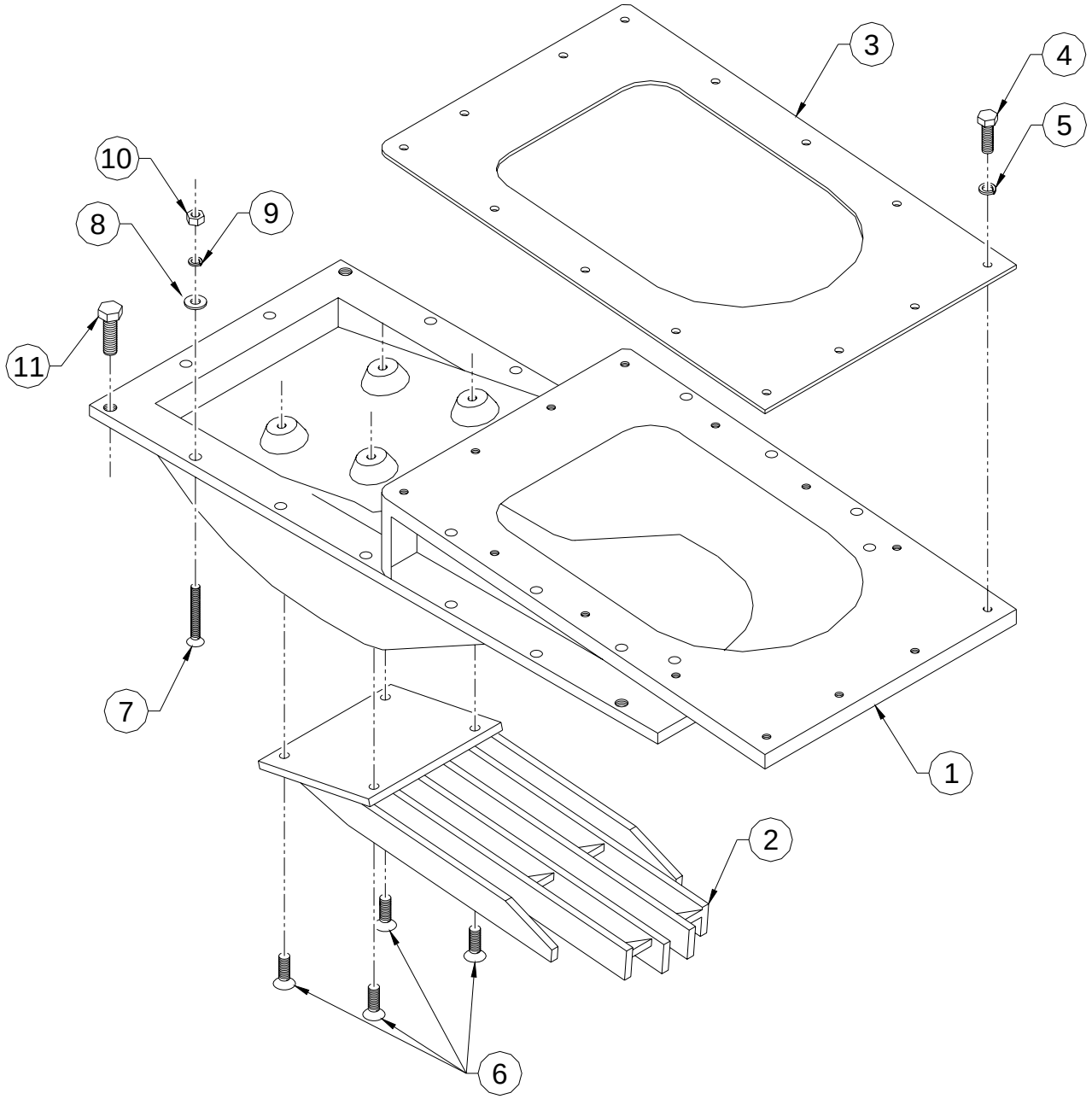
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1407
2	GRATE	1	I4107
3	GASKET	1	G1001
4	HHCS, 5/16-18 X 1-1/4	10	F05 18 10 HH
5	LOCKWASHER, 5/16	10	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH

SYM.	DESCRIPTION	QTY.	PART NO.
7	FHMS, 1/4-20 X 2	18	F04 20 16 FH
8	AN WASHER, 1/4	18	F04 AN
9	LOCKWASHER, 1/4	18	F04 LW
10	HEX NUT, 1/4-20	18	F04 20 HN
11	GASKET	1	G5001

AMERICAN TURBINE

IK-1003 INTAKE

FIBERGLASS BOAT W / 12-S JET



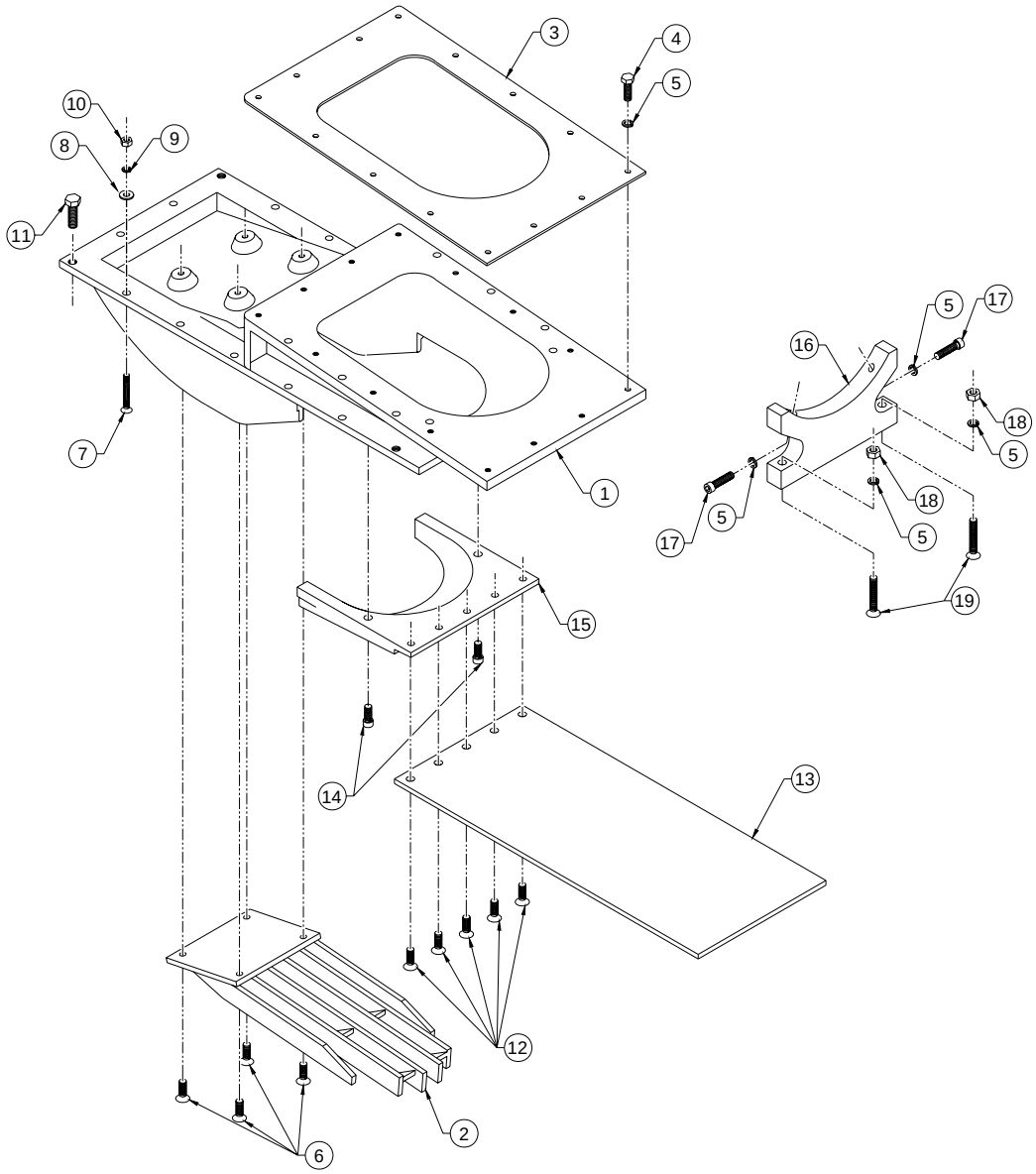
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1003
2	SPEED GRATE	1	I4007
3	INTAKE GASKET	1	G1006
4	HHCS, 5/16-18 X 1-1/4	14	F05 18 10 HH
5	LOCKWASHER, 5/16	14	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH

SYM.	DESCRIPTION	QTY.	PART NO.
7	FHMS, 1/4-20 X 2	14	F04 20 16 FH
8	AN WASHER, 1/4	14	F04 AN
9	LOCKWASHER, 1/4	14	F04 LW
10	HEX NUT, 1/4-20	14	F04 20 HN
11	HHCS, 3/8-16 X 1-1/4	4	F06 16 10 HH

AMERICAN TURBINE

IK-1003HP INTAKE

FIBERGLASS BOAT W / 12-S JET



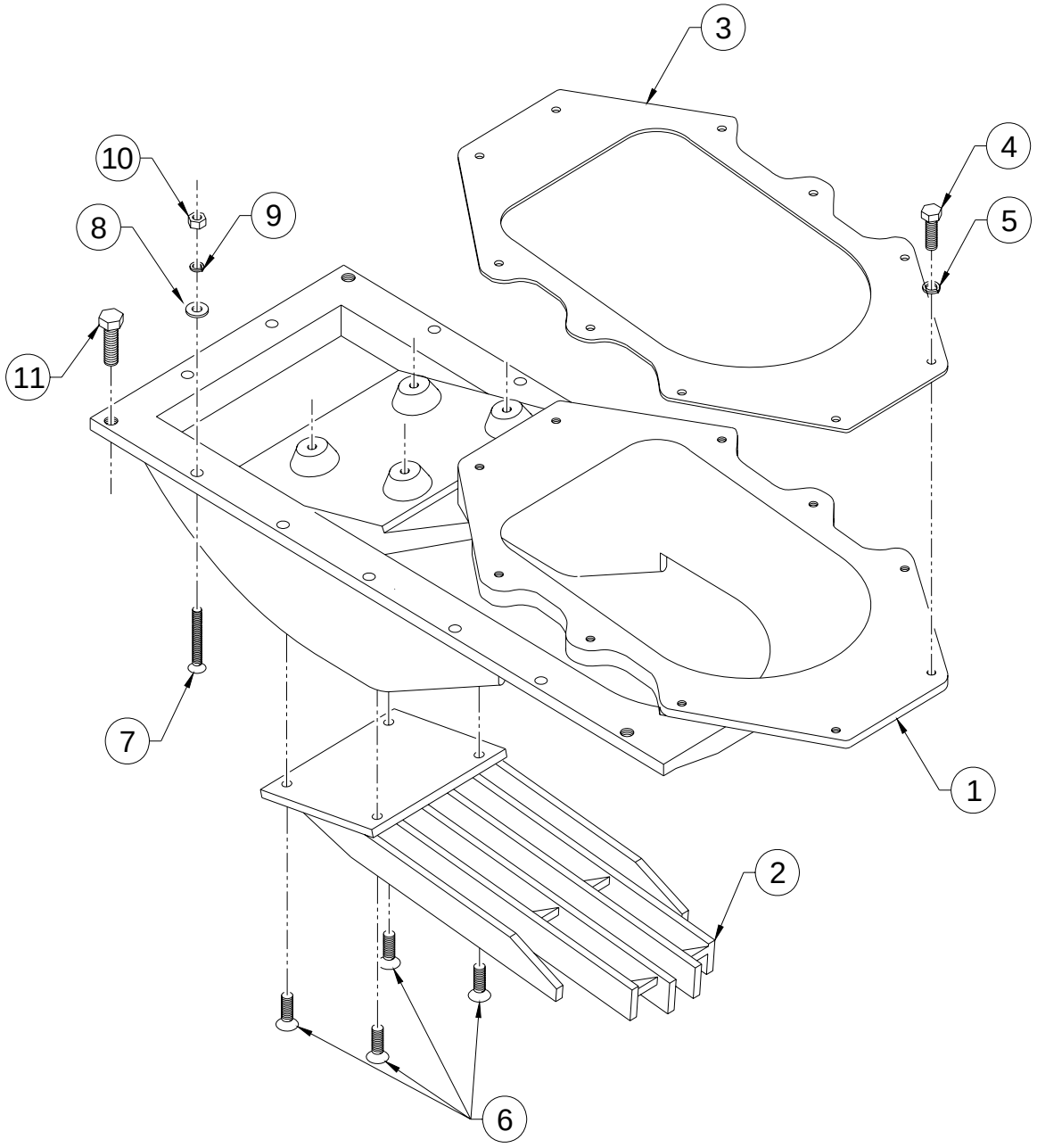
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1003HP
2	SPEED GRATE	1	I4007
3	GASKET	1	G1006
4	HHCS, 5/16-18 1-1/4	14	F05 18 10 HH
5	LOCKWASHER, 5/16	18	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH
7	FHMS, 1/4-20 X 2	14	F04 20 16 FH
8	AN WASHER, 1/4	14	F04 AN
9	LOCKWASHER, 1/4	14	F04 LW
10	HEX NUT, 1/4-20	14	F04 20 HN

SYM.	DESCRIPTION	QTY.	PART NO.
11	HHCS, 3/8-16 X 1-1/4	4	F06 16 10 HH
12	FHMS, 5/16-18 X 1	5	F05 18 08 FH
13	RIDEPLATE	1	I6607
14	SHCS, 5/16-18 X 1/2	2	F05 18 04 SH
15	SHOE	1	I6***
16	YOKE	1	I7003
17	SHCS, 5/16-18 X 1-1/4	2	F05 18 10 SH
18	HEX NUT, 5/16-18	2	F05 18 HN
19	FHMS, 5/16-18 X 2	2	F05 18 16 FH

AMERICAN TURBINE

I-1007 INTAKE

FIBERGLASS BOAT W / AT-309 JET



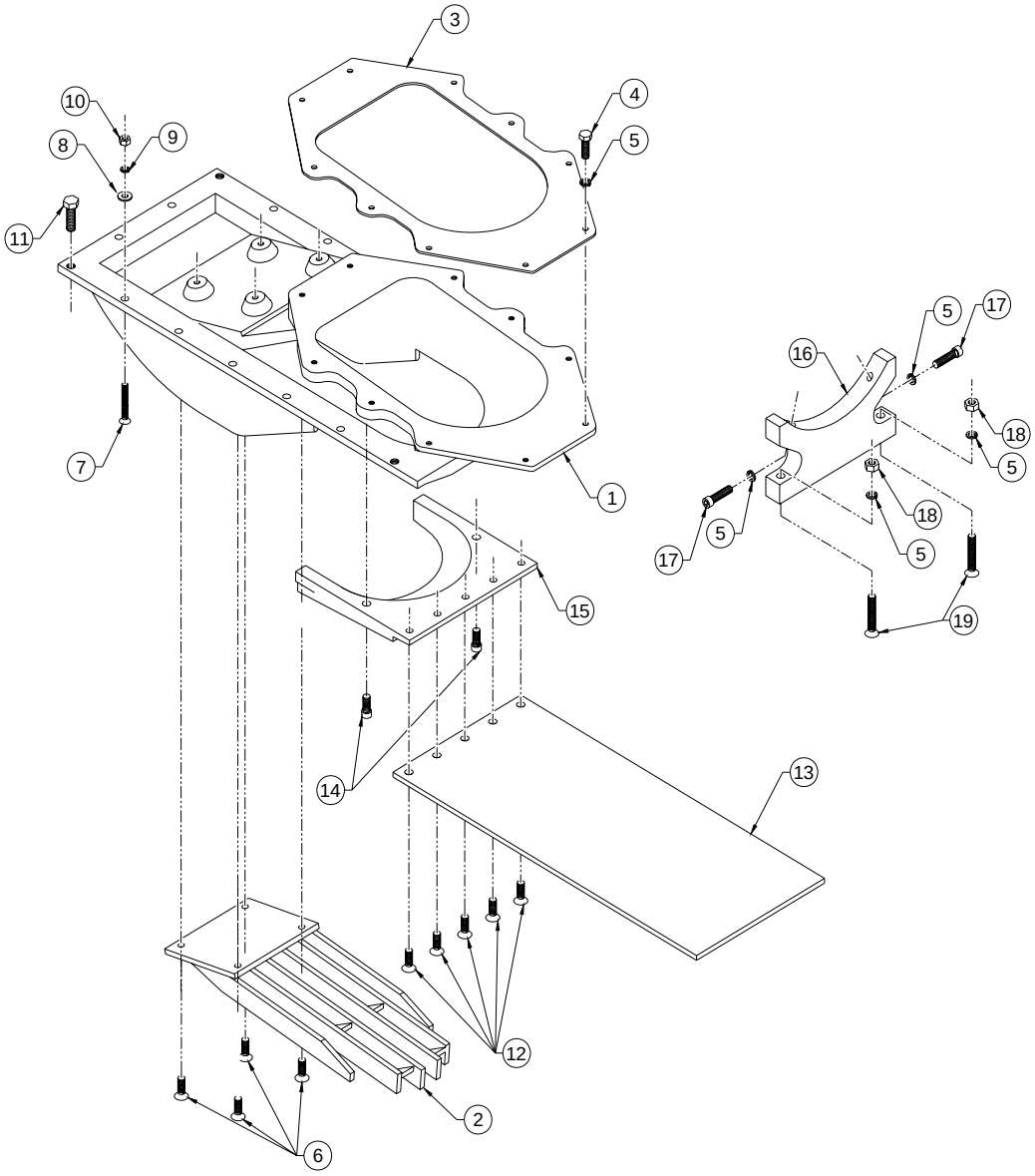
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1007
2	SPEED GRATE	1	I4007
3	INTAKE GASKET	1	G1001
4	HHCS, 5/16-18 X 1-1/4	10	F05 18 10 HH
5	LOCKWASHER, 5/16	10	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH

SYM.	DESCRIPTION	QTY.	PART NO.
7	FHMS, 1/4-20 X 2	12	F04 20 16 FH
8	AN WASHER, 1/4	12	F04 AN
9	LOCKWASHER, 1/4	12	F04 LW
10	HEX NUT, 1/4-20	12	F04 20 HN
11	HHCS, 3/8-16 X 1-1/4	4	F06 16 10 HH

AMERICAN TURBINE

I-1007HP INTAKE

FIBERGLASS BOAT W / AT-309 JET



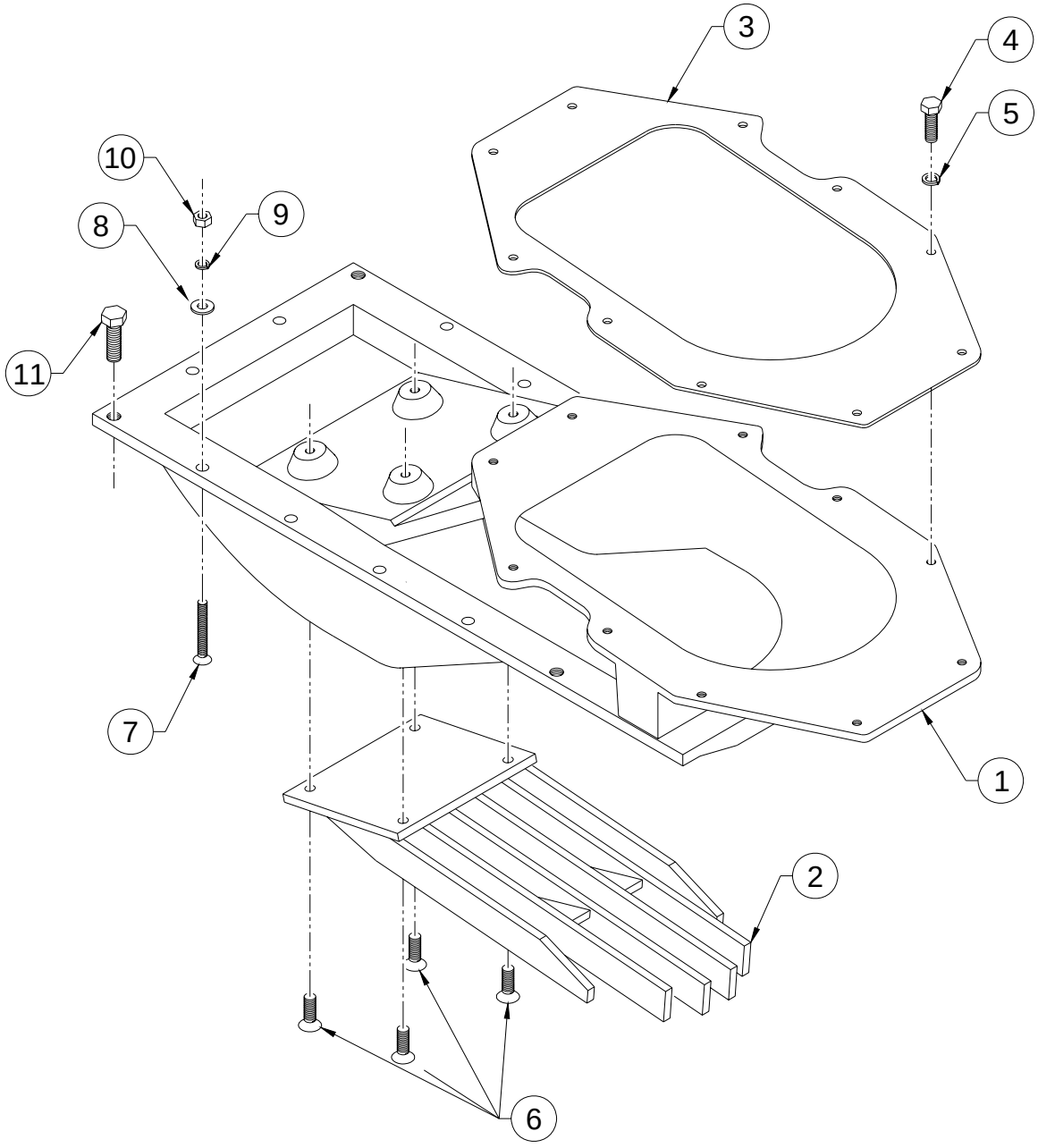
SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1007HP
2	SPEED GRATE	1	I4007
3	GASKET	1	G1001
4	HHCS, 5/16-18 1-1/4	10	F05 18 10 HH
5	LOCKWASHER, 5/16	14	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH
7	FHMS, 1/4-20 X 2	12	F04 20 16 FH
8	AN WASHER, 1/4	12	F04 AN
9	LOCKWASHER, 1/4	12	F04 LW
10	HEX NUT, 1/4-20	12	F04 20 HN

SYM.	DESCRIPTION	QTY.	PART NO.
11	HHCS, 3/8-16 X 1-1/4	4	F06 16 10 HH
12	FHMS, 5/16-18 X 1	5	F05 18 08 FH
13	RIDEPLATE	1	I6607
14	SHCS, 5/16-18 X 1/2	2	F05 18 04 SH
15	SHOE	1	I6***
16	YOKE	1	I7003
17	SHCS, 5/16-18 X 1-1/4	2	F05 18 10 SH
18	HEX NUT, 5/16-18	2	F05 18 HN
19	FHMS, 5/16-18 X 2	2	F05 18 16 FH

AMERICAN TURBINE

I-1507 INTAKE

FIBERGLASS BOAT W / SD-309 JET

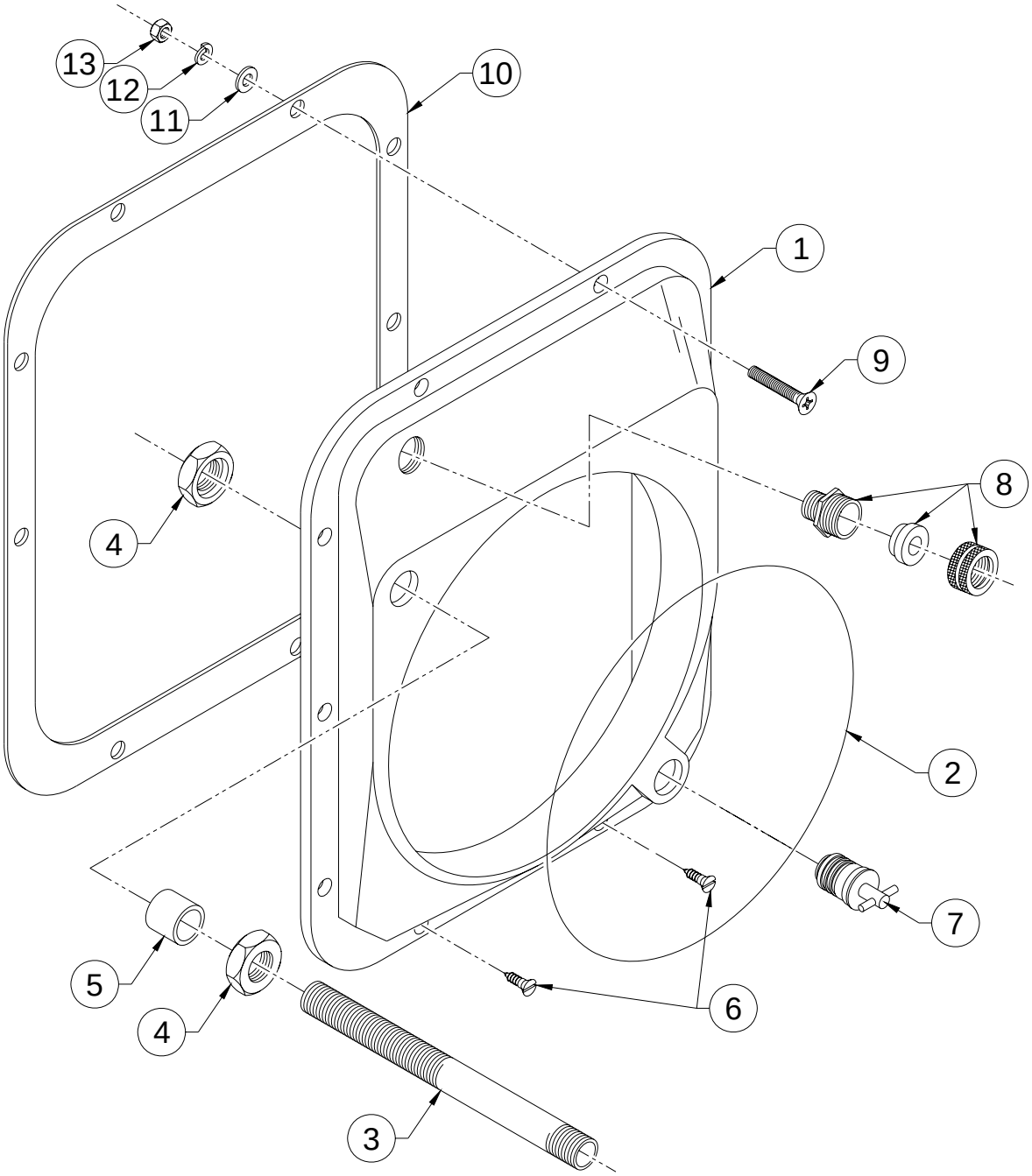


SYM.	DESCRIPTION	QTY.	PART NO.
1	INTAKE	1	I1507
2	SPEED GRATE	1	I4007
3	INTAKE GASKET	1	G1001
4	HHCS, 5/16-18 X 1-1/4	10	F05 18 10 HH
5	LOCKWASHER, 5/16	10	F05 LW
6	FHMS, 5/16-18 X 3/4	4	F05 18 06 FH

SYM.	DESCRIPTION	QTY.	PART NO.
7	FHMS, 1/4-20 X 2	12	F04 20 16 FH
8	AN WASHER, 1/4	12	F04 AN
9	LOCKWASHER, 1/4	12	F04 LW
10	HEX NUT, 1/4-20	12	F04 20 HN
11	HHCS, 3/8-16 X 1-1/4	4	F06 16 10 HH

AMERICAN TURBINE

0 / 9 DEGREE TRANSOM HOUSING



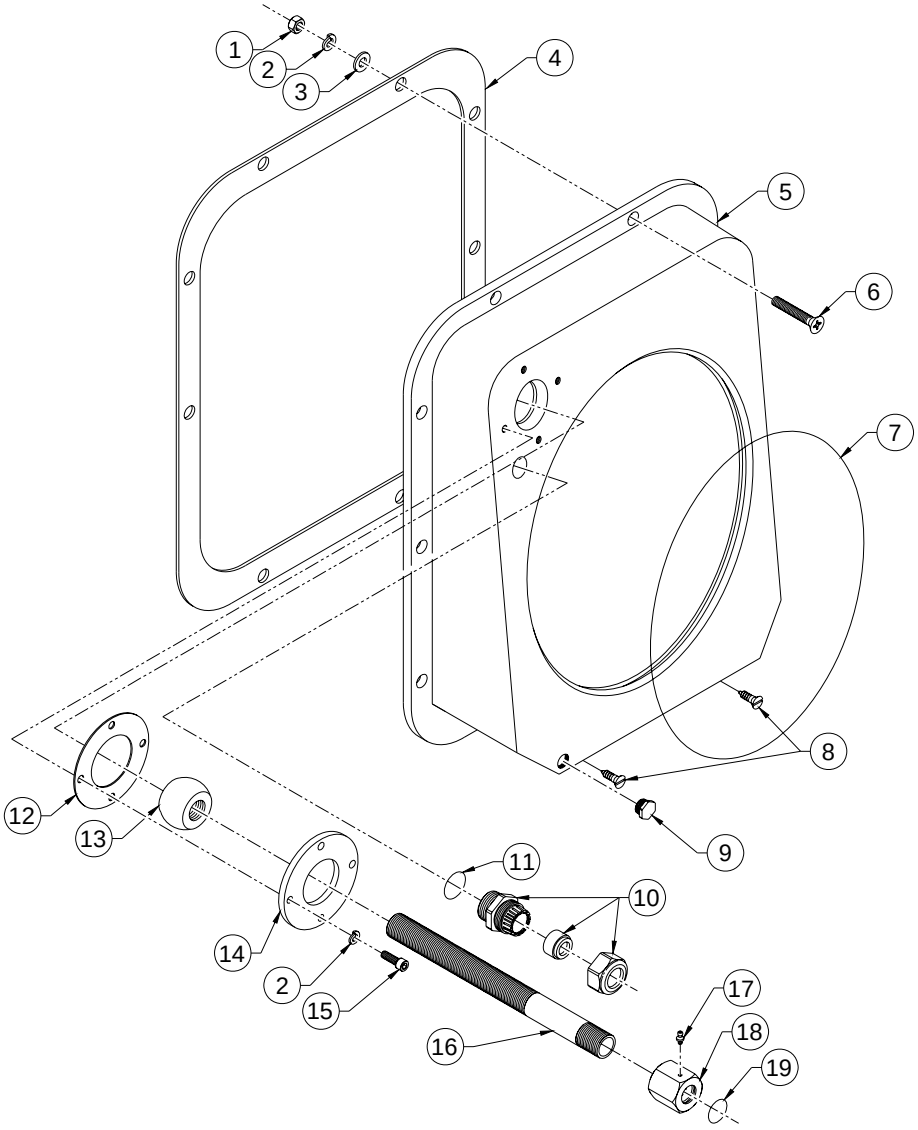
SYM.	DESCRIPTION	QTY.	PART NO.
1	0-9 TRANSOM HOUSING	1	****
2	TRANSOM O-RING	1	O2002
3	STEERING TUBE	1	T3007
4	STEERING TUBE NUT	2	R9206
5	STEERING TUBE GROMMET	1	R9106
6	WOODSCREW, #14 X 1	2	F04 08 WS
7	DRAIN PLUG	1	M4601

SYM.	DESCRIPTION	QTY.	PART NO.
8	REVERSE CABLE PACKER	1	T2007
9	FHMS, 1/4-20 X 2	10	F04 20 16 FH
10	TRANSOM GASKET	1	G3006
11	AN WASHER, 1/4	10	F04 AN
12	LOCKWASHER, 1/4	10	F04 LW
13	HEX NUT, 1/4-20	10	F04 20 HN

AMERICAN TURBINE

9 / 18 DEGREE TRANSOM HOUSING

PART # TK1105



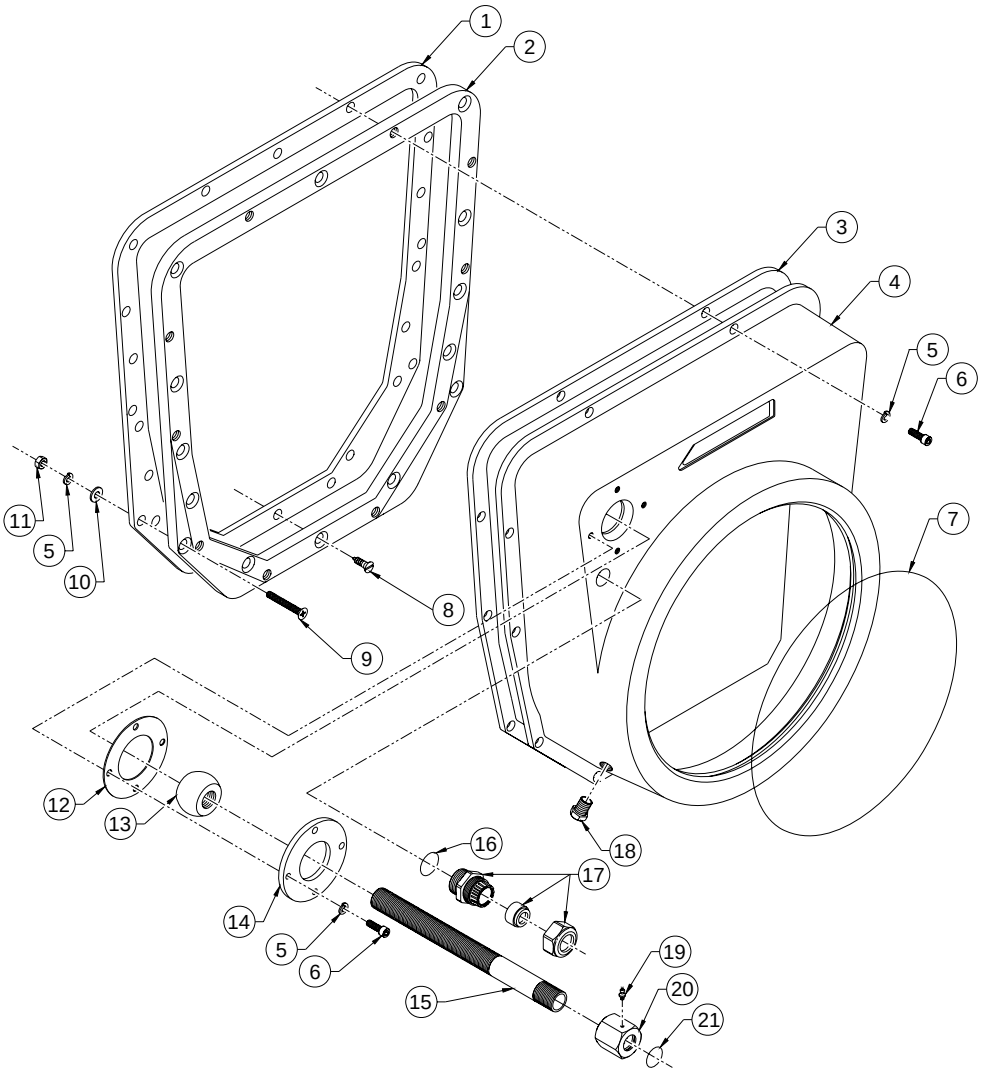
SYM.	DESCRIPTION	QTY.	PART NO.
1	HEXNUT, 1/4-20	8	F04 20 HN
2	LOCKWASHER, 1/4	12	F04 LW
3	FLAT WASHER, 1/4	8	F04 FW
4	TRANSOM GASKET	1	G3001
5	TRANSOM HOUSING	1	T1105
6	FHMS, 1/4-20 X 2	8	F04 20 16 FH
7	O-RING	1	O1201
8	WOOD SCREW, #14 X 1	2	F04 08 WS
9	BRASS DRAIN PLUG	1	T3501
10	REVERSE CABLE PACKER	1	T2101

SYM.	DESCRIPTION	QTY.	PART NO.
11	O-RING REV CABLE PACKER	1	O3001
12	STEERING MOUNT GASKET	1	G4001
13	STEERING TUBE BALL	1	T2601
14	BALL FLANGE	1	T2701
15	SHCS, 1/4-20 X 7/8	4	F04 20 07 SH
16	STEERING TUBE	1	T3007
17	GREASE ZERK	1	M4801
18	STEERING TUBE SEAL	1	T3107
19	O-RING, STEERING TUBE SEAL	1	O3501

AMERICAN TURBINE

DEEP TRANSOM HOUSING

PART # TK1001



SYM.	DESCRIPTION	QTY.	PART NO.
1	GASKET, TRANSOM	1	G3601
2	TRANSOM RING	1	T1601
3	GASKET, TRANSOM RING	1	G3501
4	TRANSOM HOUSING	1	T1001
5	LOCKWASHER, 1/4	27	F04 LW
6	SHCS, 1/4-20 X 7/8	14	F04 20 07 SH
7	TRANSOM O-RING	1	O1201
8	WOOD SCREW, #14 X 1	1	F04 08 WS
9	FHMS, 1/4-20 X 2	13	F04 20 16
10	FLAT WASHER, 1/4	13	F04 FW
11	HEXNUT, 1/4-20	13	F04 20 HN

SYM.	DESCRIPTION	QTY.	PART NO.
12	FLANGE GASKET	1	G4001
13	STEERING TUBE BALL	1	T2601
14	BALL FLANGE	1	T2701
15	STEERING TUBE	1	T3007
16	O-RING, CABLE PACKER	1	O3001
17	REVERSE CABLE PACKER	1	T2101
18	DRAIN PLUG	1	T3501
19	GREASE ZERT	1	M4801
20	STEERING TUBE SEAL	1	T3107
21	O-RING, STR. TUBE SEAL	1	O3501

AMERICAN TURBINE

JETDRIVE INSTALLATION
MODEL SD-309
FIBERGLASS

These instructions apply to transom angle of 8 degrees and from 3/8 to 1" thick and dead rise angles from 0 to 20 degrees. If your mold has a greater transom angle a wedge can be clayed into the mold to correct the angle.

INTAKE CUTOUT
The intake cutout dimensions are shown on Exhibit A.

TRANSOM CUTOUT
An initial cut-out is made in the transom to allow the intake to be installed. See Exhibit A.

INSTALLING INTAKE
There are four 3/8 – 16 tapped holes in each mounting flange that is used for jack screws. These screws allow for setting of the intake to the proper angle. An intake setting fixture, that bolts to the rear of the intake, is available to set the intake the proper distance from the transom as well as a means to check the correct angle.

a. Set the intake in the hull with the four jack screws installed.
b. The bottom center of the intake at the front of the intake must be flush with the bottom of the hull at the front cut-out use the jack screws at the front of the intake to hold your setting.
c. Using the jack screws at the rear of the intake to move the intake up or down. Set the machined surface (where the pump unit bolts) at 4-5 degrees relative to the keel.
d. Check the intake to insure that it is level with the hull side to side.
e. Tape around the perimeter 1 – ½" from the cut-out. (This makes your epoxy job look much nicer.)
f. Mix your bonding compound according to the instructions. Place the compound around the cut-out and also the mounting flange of the intake.
g. Set the intake in the hull so the jack screws come in contact with the hull.
h. Double check the intake setting.
i. Smooth out and fare in the compound to the tape line also smooth out the compound on the bottom side of the intake.
j. Remove the tape.
k. Wait for the compound to kick-out.
l. Drill the mounting holes with a 17/64" drill.
m. Counter-sink the drilled holes for Flathead Machine screws. (From the outside of the hull.)
n. Use bonding compound under the heads of the machine screws to make them water tight. Install screws, washers, and nuts.
o. Mark and drill transom mounting holes.
p. Mark and drill cutout holes.
q. Complete transom cutout.

SPECIAL NOTE: If you are using a HIGH-PERFORMANCE INTAKE you must follow these steps to insure the ride-plate centers up with the bowl.

a. Bolt the ride-plate to the intake.
b. Bolt the jet-unit to the intake and to the transom but do not tighten. Use the gaskets provided.
c. Set the yoke on the ride-plate.
d. Move the jet-unit side to side to line up with the ride-plate and yoke.
e. Tighten jet-unit and transom flange bolts.

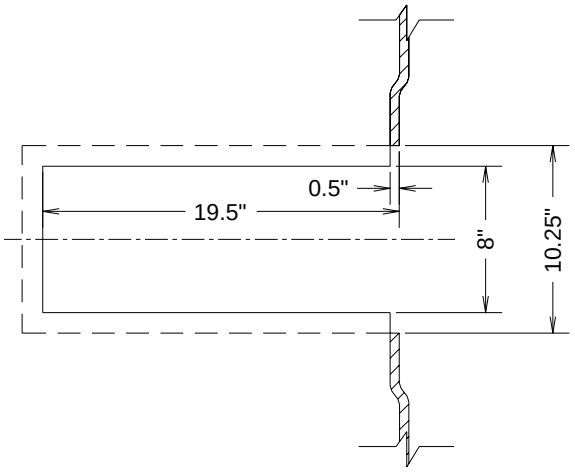
AMERICAN TURBINE

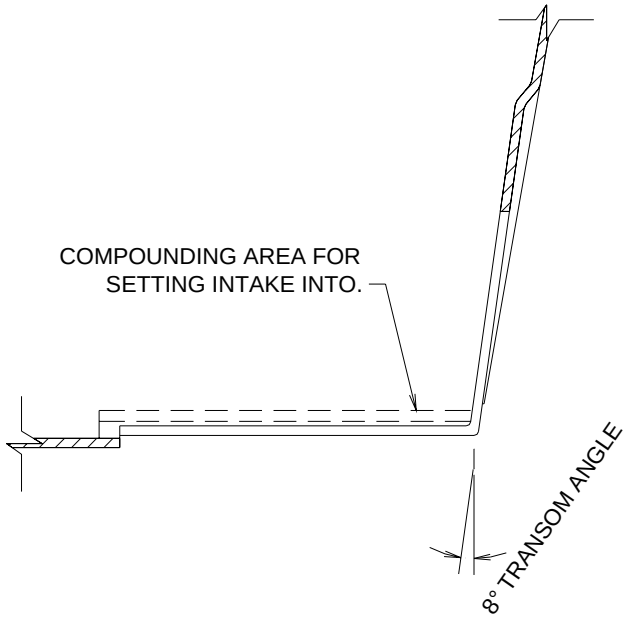
INTAKE INSTALLATION

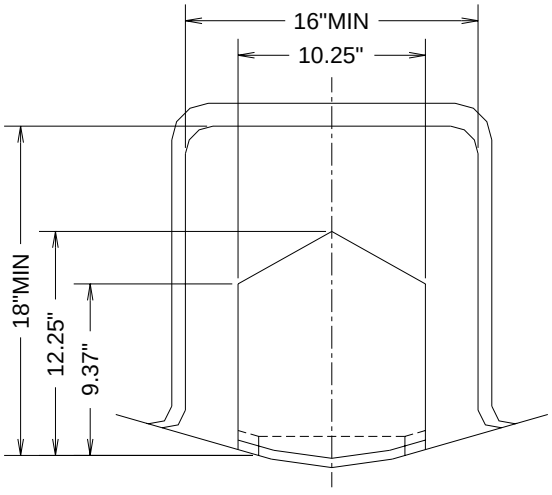
SD-309

FIBERGLASS HULL PREPARATION DETAILS

EXHIBIT A







AMERICAN TURBINE

JETDRIVE INSTALLATION
MODEL SD-309
WELDED ALUMINUM

These instructions apply to transom angle of 8 degrees and from 1/8” to 3/8” thick and dead rise angles from 0 to 20 degrees.

INTAKE CUTOUT
The intake cutout dimensions are shown on Exhibit B or C. Exhibit B is for a Vee Bottom boat and Exhibit C is for a Delta Bottom boat.

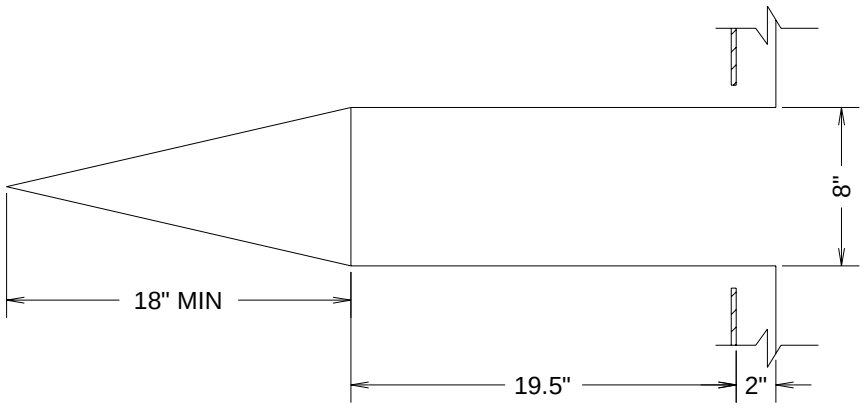
TRANSOM CUTOUT
An initial cut-out is made in the transom to allow the intake to be installed. See Exhibit B or C.

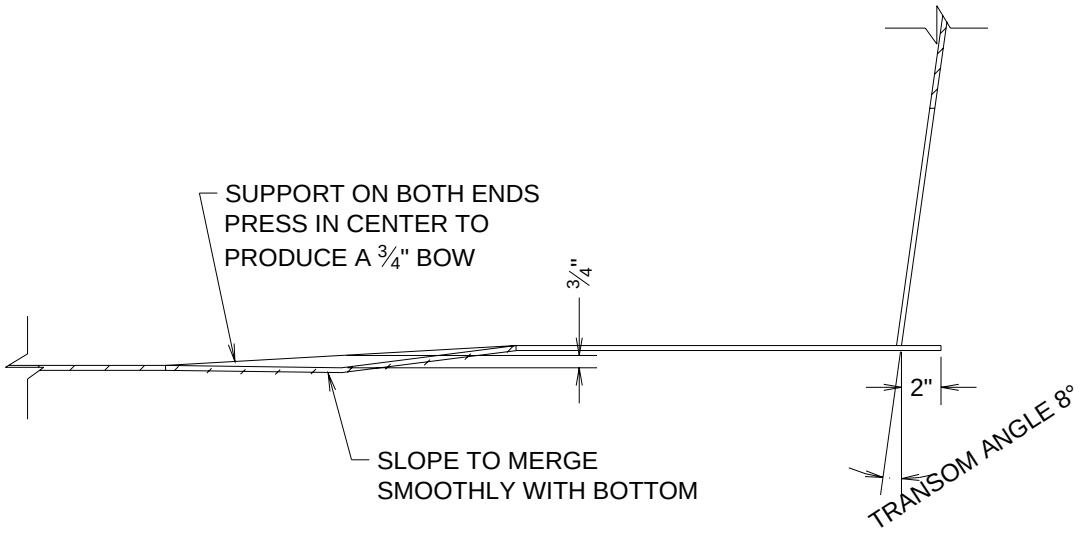
INSTALLING INTAKE
a. A setup jig is provided to aid in the alignment of the intake. Bolt to the intake.
b. Weld both sides of the intake inside and out.
c. Mark and drill transom mounting holes.
d. Mark and drill cutout holes.
e. Complete transom cutout for standard steering. See Exhibit D.
f. Complete transom cutout for HTR II steering. See Exhibit E.

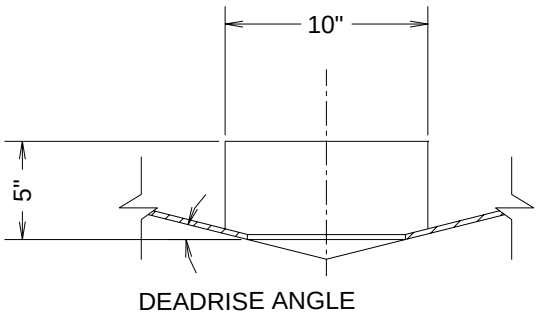
AMERICAN TURBINE

INTAKE INSTALLATION

SD-309
ALUMINUM HULL PREPARATION
DETAILS FOR VEE BOTTOM
EXHIBIT B





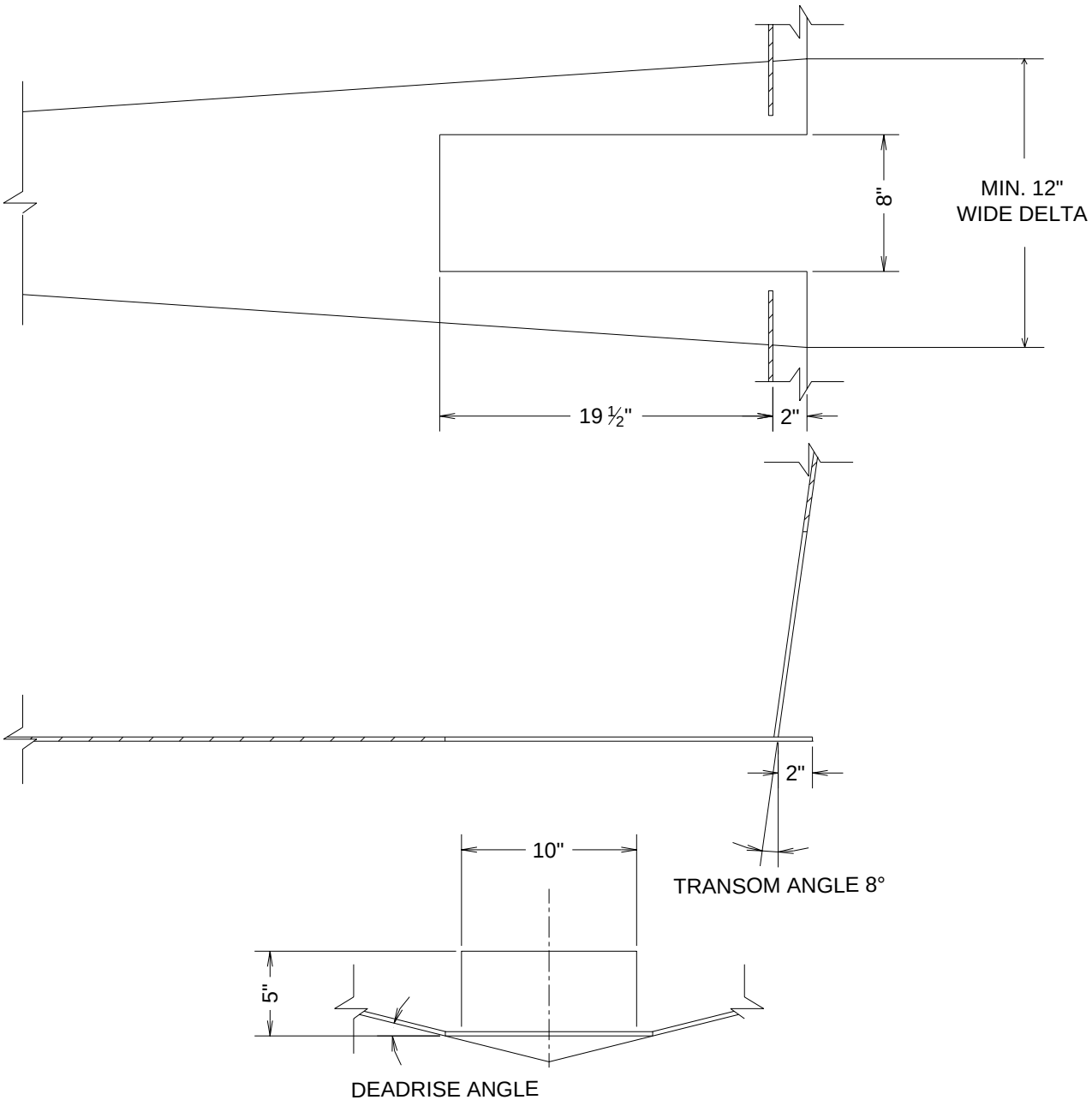


PELIMINARY TRANSOM CUT

AMERICAN TURBINE

INTAKE INSTALLATION

SD-309
ALUMINUM HULL PREPARATION
DETAILS FOR DELTA BOTTOM
EXHIBIT C



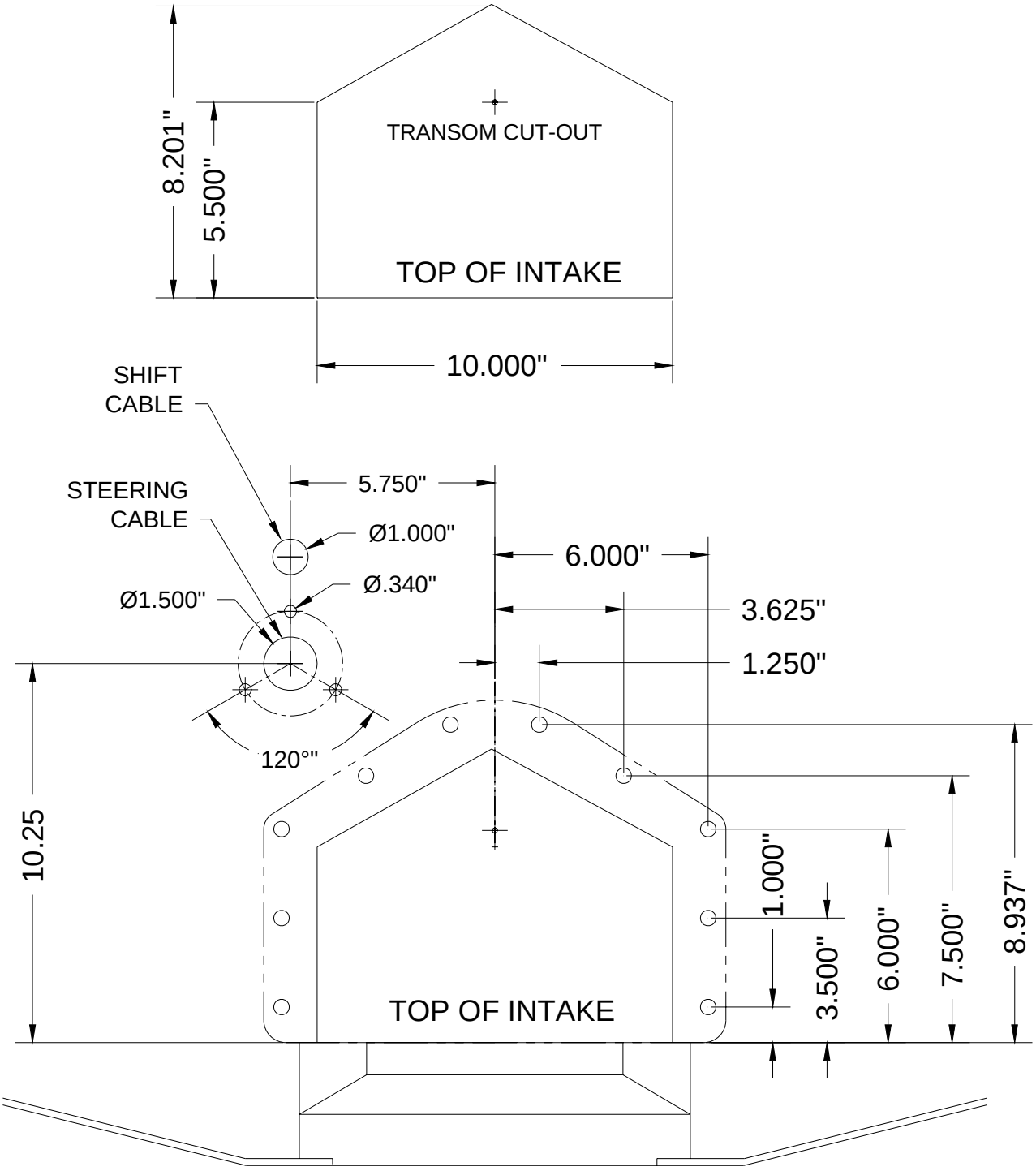
PELIMINARY TRANSOM CUT

AMERICAN TURBINE

TRANSOM LAYOUT SD-309

W / STANDARD STEERING

EXHIBIT D



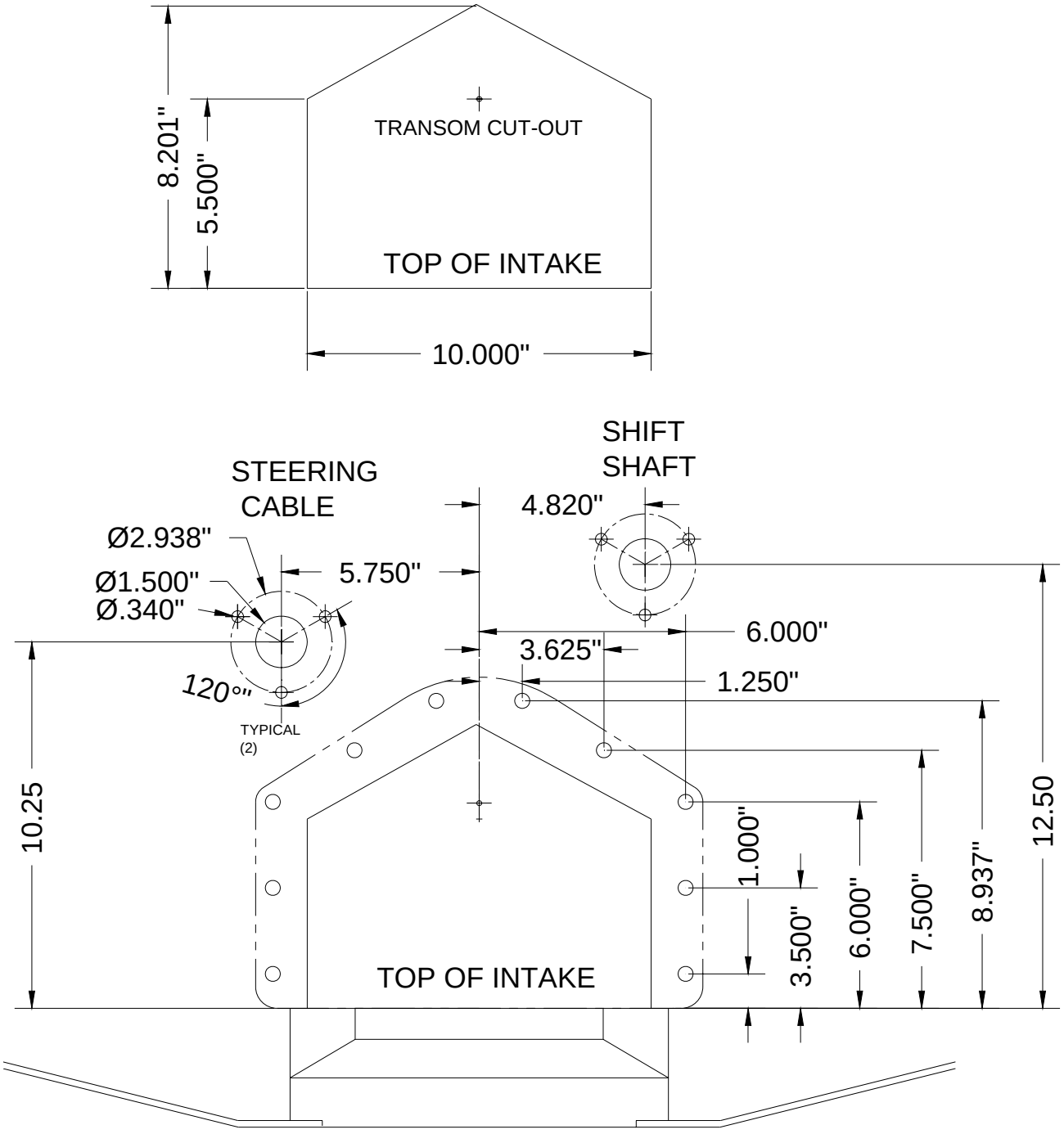
VIEW FROM OUTSIDE TRANSOM

AMERICAN TURBINE

TRANSOM LAYOUT SD-309

W / HTR II STEERING

EXHIBIT E



VIEW FROM OUTSIDE TRANSOM

AMERICAN TURBINE

JETDRIVE INSTALLATION
MODELS AT-309 & DOMINATOR 12-S
USING TK1105 TRANSOM HOUSING

These instructions apply to transom angles from 9 to 16 degrees and from 3/8 to 1" thick and deadrise angles from 0 to 20 degrees.

INTAKE CUTOUT
The intake cutout dimensions are shown on Exhibit F.

TRANSOM CUTOUT
A transom cutout marking template is available from American Turbine. This template is designed for quick and accurate marking of the transom cutout. You may order the template by calling the main office.

When using the template for the very first time always check the scribed cutout marking on the boat against the dimensions given on Exhibit G. If the template cutout marking is more than 1/8 inch higher or lower than the dimensions given on Exhibit G then adjust the template's bottom pegs up or down accordingly.

Without the template, the cutout procedure for the transom should be as follows:

a. Measure 2" up the transom 4" outward either side of the transom center line. Mark these two points (Exhibit G).
b. Scribe a horizontal line between these points.
c. Using the transom sealing ring, place the inside bottom edge along the scribed line.
d. Hold the ring against the transom and mark along the inside of the ring.
e. Cut ½" inside the line except at the bottom where you must cut to the line.

INSTALLING INTAKE
There are four 3/8 – 16 tapped holes in each corner of the mounting flange that are used for jack screws. These screws allow for setting of the intake to the proper angle.

PREPARATION
The coating must be ground off where the bonding compound comes in contact with the intake, also grind the fiberglass around the intake cut-out in the hull.

a. Set the intake in the hull with the four jack screws installed.
b. The bottom center of the intake at the front of the intake must be flush with the bottom of the hull at the front cut-out. Use the jack screws at the front of the intake to hold your setting.
c. Using the jack screws at the rear of the intake to move the intake up or down. Set the machined surface (where the jet unit bolts) at 4-5 degrees relative to the keel.
d. Check the intake to insure that it is level with the hull side to side.
e. Tape around the perimeter 1 – ½" from the cut-out. (This makes your epoxy job look much nicer).
f. Mix your bonding compound according to the instructions. Place the compound around the cut-out and also the mounting flange of the intake.
g. Set the intake in the hull so the jack screws come in contact with the hull.
h. Double check the intake setting.
i. Smooth out and fare in the compound to the tape line also smooth out the compound on the bottom side of the intake.
j. Remove the tape.
k. Wait for the compound to kick-out.
l. Drill the mounting holes with a 17/64" drill.
m. Counter-sink the drilled holes for Flathead Machine screws. (From the outside of the hull).
n. Use bonding compound under the heads of the machine screws to make them water tight. Install screws washers and nuts.

AMERICAN TURBINE

JETDRIVE INSTALLATION
MODELS AT-309 & DOMINATOR 12-S
USING TK1105 TRANSOM HOUSING
(CONTINUED)

INSTALLING TRANSOM HOUSING

SPECIAL NOTE: If you are using a HIGH-PERFORMANCE INTAKE you must follow these steps to insure the ride-plate centers up with the bowl.

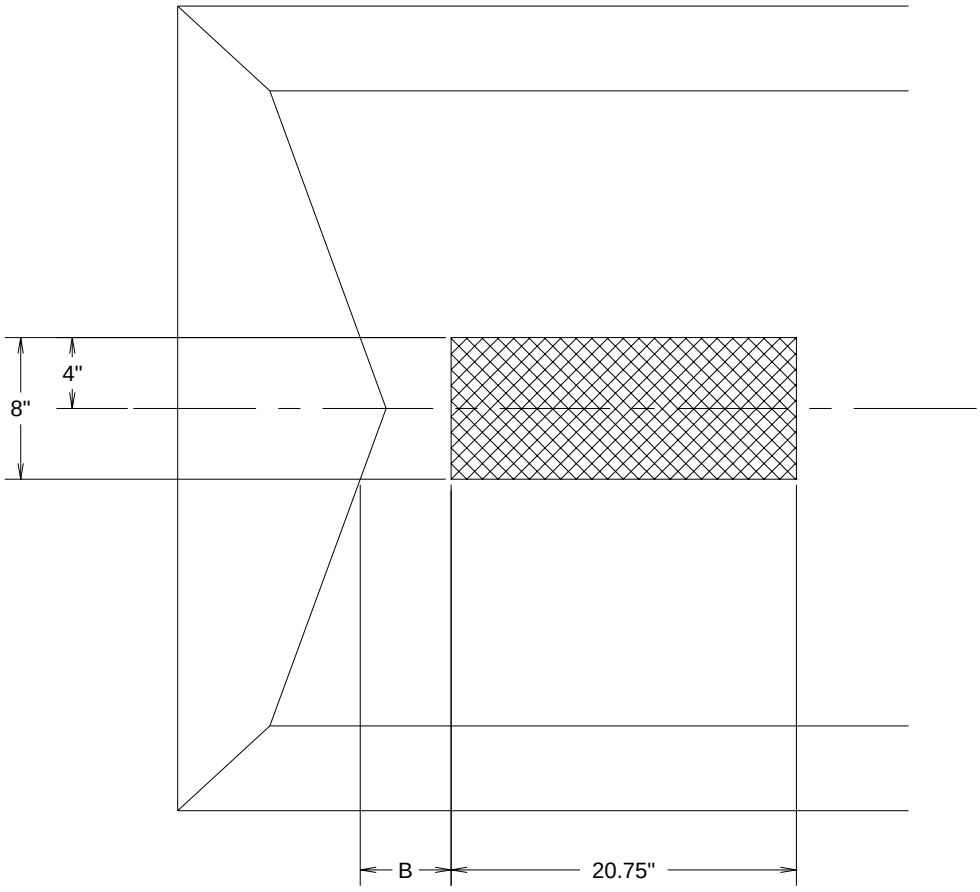
a. Bolt the ride-plate to the intake.
b. Bolt the jet-unit to the intake but do not tighten.
c. Set the yoke on the ride-plate.
d. Move the jet-unit side to side to line up with the ride-plate and yoke.
e. Tighten jet-unit bolts.
f. With the transom ring and transom gasket held in place on the ring with either glue or tape, slide the entire transom housing assembly over the bowl flush against the transom. A small amount of WD-40 or similar lubricant will help the o-ring to slide.
g. You will note that there are two chamfered bolt holes in the transom ring outside the housing. With the transom housing squares up, drill through both chamfered bolt holes with a 17/64" drill. Using the ¼ - 20 x 2" FHMS washer and nut, place a small amount of silicone sealer under the bolt head. Install and tighten.
h. Unbolt the transom housing from the ring.
i. Drill through all the chamfered bolt holes except the bottom center hole with a 17-64" drill. Drill the bottom, center hole with the appropriate size drill for the #14 x 11/4" Flathead wood screw.
j. Bolt the transom housing to the ring.
k. Connect all cables.

Properly installed, this transom is designed to seal without the use of silicone or any other sealant. NOTE: If the transom of the boat is particularly wavy you may want to run a bead of silicone between the transom and the transom ring.

AMERICAN TURBINE

INTAKE INSTALLATION

AT-309 & DOMINATOR 12-S
FIBERGLASS & WELDED ALUMINUM
W / DEEP SET TRANSOM HOUSING
EXHIBIT F



IMPORTANT:

IN ORDER TO ESTABLISH LENGTH "B", ANGLE "A" MUST FIRST BE DETERMINED.

NOTE:

LENGTH "B" IS ALWAYS MEASURED 4" OFF BOAT CENTER LINE.

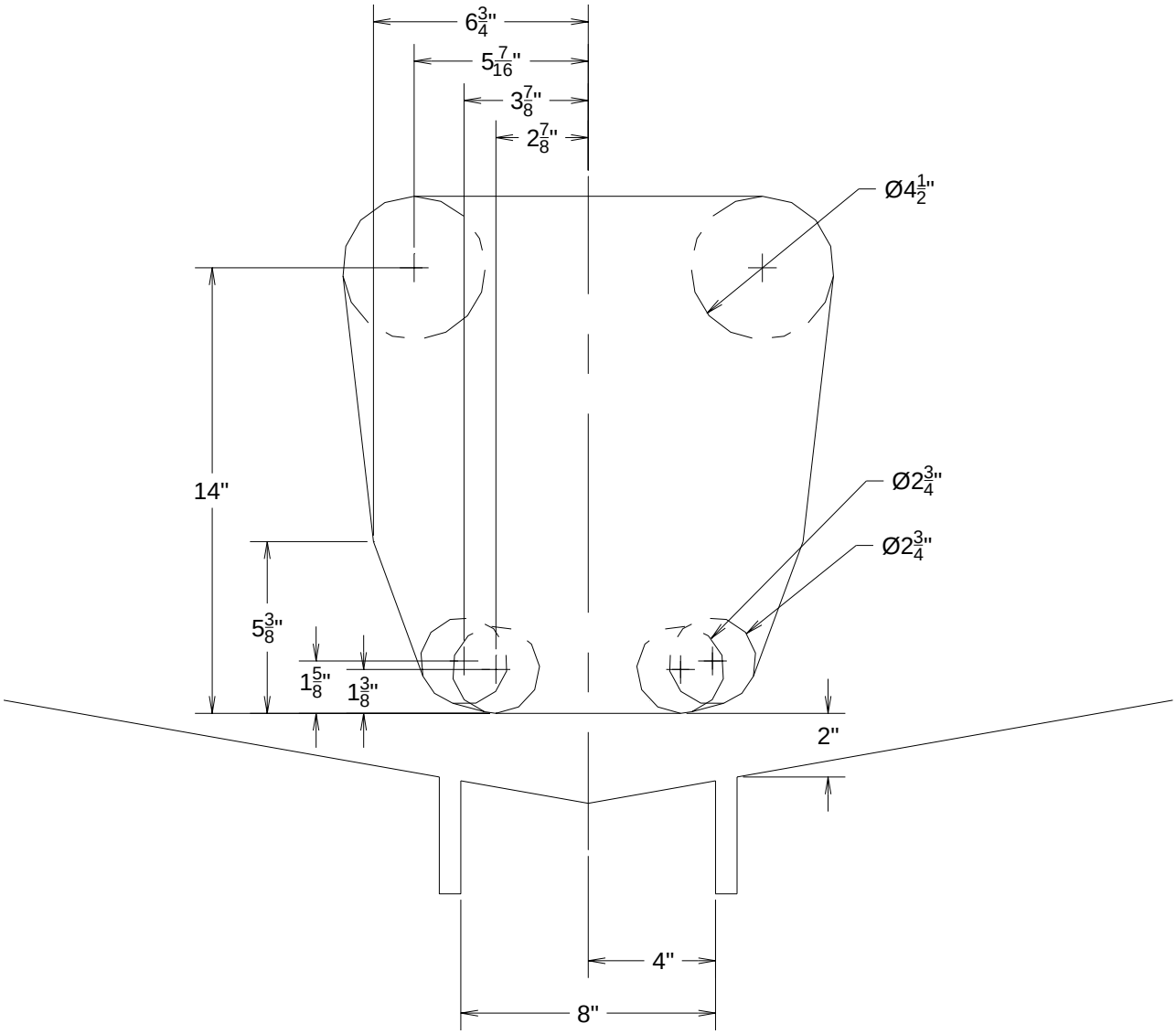
TRANSOM ANGLE "A" DEGREES	LENGTH OF "B" IN INCHES
9°	2 3/8"
10°	2 5/16"
11°	2 1/4"
12°	2 3/16"
13°	2 1/4"
14°	2 5/16"
15°	2 3/8"
16°	2 7/16"

AMERICAN TURBINE

TRANSOM CUTOUT

TRANSOM HOUSING PART # TK1105

EXHIBIT G



AMERICAN TURBINE

JETDRIVE INSTALLATION
MODELS AT-309 & DOMINATOR 12-S
USING TK1001 TRANSOM HOUSING

These instructions apply to transom angles from 9 to 16 degrees and from 3/8 to 1" thick and dead rise angles from 0 to 20 degrees.

INTAKE CUTOUT
The intake cutout dimensions are shown on Exhibit H.

TRANSOM CUTOUT
The transom cutout dimensions are shown on Exhibit I.

INSTALLING INTAKE
There are four 3/8 – 16 tapped holes in each corner of the mounting flange that are used for jack screws. These screws allow for setting of the intake to the proper angle.

PREPARATION
The coating must be ground off where the bonding compound comes in contact with the intake, also grind the fiberglass around the intake cut-out in the hull.

a. Set the intake in the hull with the four jack screws installed.
b. The bottom center of the intake at the front of the intake must be flush with the bottom of the hull at the front cut-out use the jack screws at the front of the intake to hold your setting.
c. Using the jack screws at the rear of the intake to move the intake up or down. Set the machined surface (where the jet unit bolts) at 4-5 degrees relative to the keel.
d. Check the intake to insure that it is level with the hull side to side.
e. Tape around the perimeter 1 – ½" from the cut-out. (This makes your epoxy job look much nicer).
f. Mix your bonding compound according to the instructions. Place the compound around the cut-out and also the mounting flange of the intake.
g. Set the intake in the hull so the jack screws come in contact with the hull.
h. Double check the intake setting.
i. Smooth out and fare in the compound to the tape line also smooth out the compound on the bottom side of the intake.
j. Remove the tape.
k. Wait for the compound to kick-out.
l. Drill the mounting holes with a 17/64" drill.
m. Counter-sink the drilled holes for Flathead Machine screws. (From the outside of the hull).
n. Use bonding compound under the heads of the machine screws to make them water tight. Install screws washers and nuts.

AMERICAN TURBINE

JETDRIVE INSTALLATION
MODELS AT-309 & DOMINATOR 12-S
USING TK1001 TRANSOM HOUSING
(CONTINUED)

INSTALLING TRANSOM HOUSING

SPECIAL NOTE: If you are using a HIGH-PERFORMANCE INTAKE you must follow these steps to insure the ride plate centers up with the bowl.

a. Bolt the ride plate to the intake.
b. Bolt the jet-unit to the intake but do not tighten.
c. Set the yoke on the ride plate.
d. Move the jet-unit side to side to line up with the ride plate and yoke.
e. Tighten jet-unit bolts.
f. With the transom gasket held in place on the housing with either glue or tape, slide the entire transom housing assembly over the bowl flush against the transom. A small amount of WD-40 or similar lubricant will help the o-ring to slide.
g. With the transom housing squared up, drill through chamfered bolt holes with a 17/64" drill. Using the ¼ - 20 x 2" FHMS washer and nut, place a small amount of silicone sealer under the bolt head. Install and tighten.
h. Drill through all the chamfered bolt holes except the bottom holes with a 17/64" drill. Drill the bottom, center holes with the appropriate size drill for the #14 x 11/4" Flathead wood screw.
i. Connect all cables.

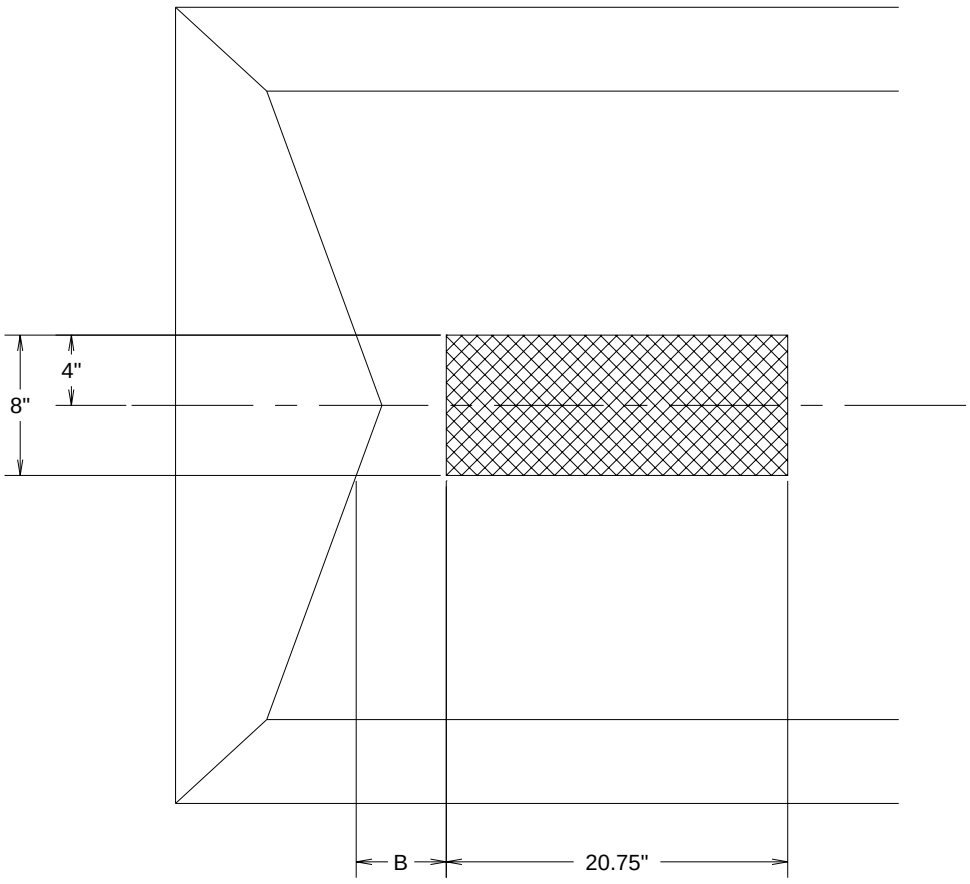
Properly installed, this transom is designed to seal without the use of silicone or any other sealant. NOTE: If the transom of the boat is particularly wavy you may want to run a bead of silicone between the transom and the transom housing.

AMERICAN TURBINE

INTAKE INSTALLATION

TRANSOM HOUSING PART # TK1001

EXHIBIT H



IMPORTANT:

IN ORDER TO ESTABLISH LENGTH "B", ANGLE "A" MUST FIRST BE DETERMINED.

NOTE:

LENGTH "B" IS ALWAYS MEASURED 4" OFF BOAT CENTER LINE.

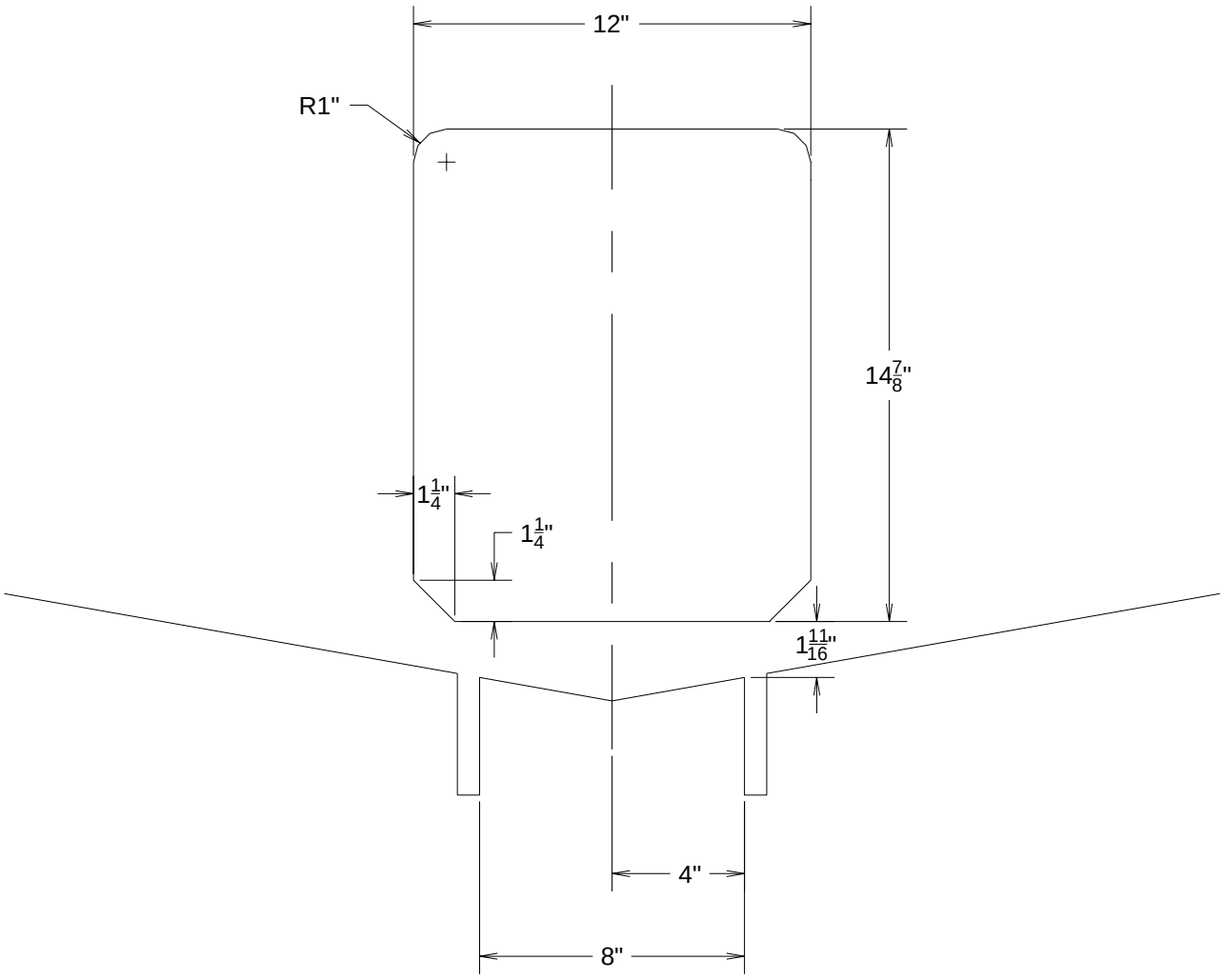
TRANSOM ANGLE "A" DEGREES	LENGTH OF "B" IN INCHES
9°	3 3/4"
10°	3 9/16"
11°	3 3/8"
12°	3 1/8"
13°	3"
14°	2 13/16"
15°	2 5/8"
16°	2 7/16"

AMERICAN TURBINE

TRANSOM CUTOUT

TRANSOM HOUSING PART # TK1001

EXHIBIT I



AMERICAN TURBINE

JETDRIVE INSTALLATION
MODEL SD-312
WELDED ALUMINUM

These instructions apply to transom angle of 8 degrees and from 1/8” to 3/8” thick and dead rise angles from 0 to 20 degrees.

INTAKE CUTOUT
The intake cutout dimensions are shown on Exhibit J or K. Exhibit J is for a Vee Bottom boat and Exhibit K is for a Delta Bottom boat.

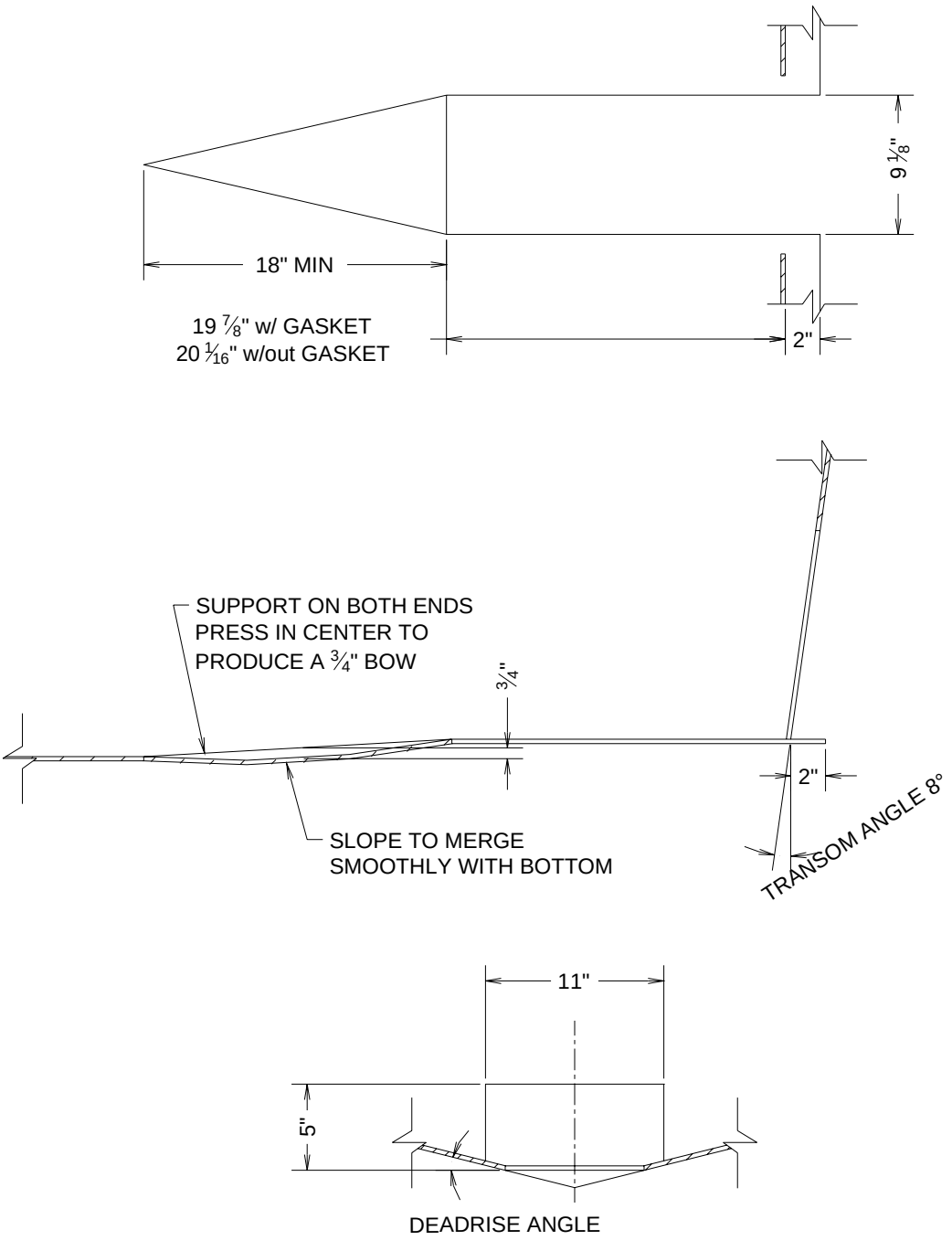
TRANSOM CUTOUT
An initial cut-out is made in the transom to allow the intake to be installed. See Exhibit J or K.

INSTALLING INTAKE
a. Weld both sides of the intake inside and out.
b. Mark and drill transom mounting holes.
c. Mark and drill cutout holes.
d. Complete transom cutout for standard steering. See Exhibit L.
e. Complete transom cutout for HTR II steering. See Exhibit M.
f. See sealant placement detail before installing jet unit. See Exhibit N.

AMERICAN TURBINE

INTAKE INSTALLATION

SD-312
ALUMINUM HULL PREPARATION
DETAILS FOR VEE BOTTOM
EXHIBIT J

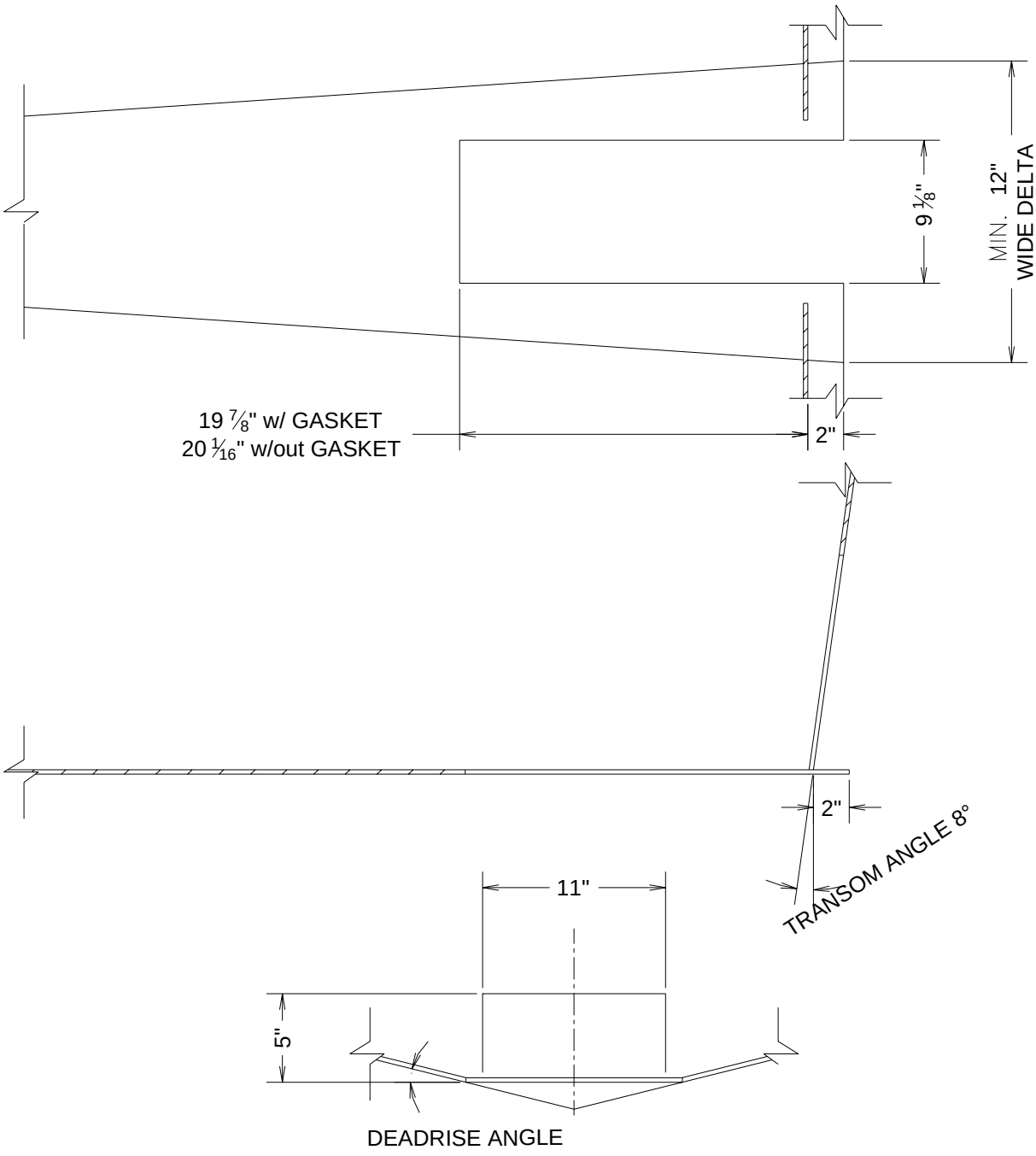


PELIMINARY TRANSOM CUT

AMERICAN TURBINE

INTAKE INSTALLATION

SD-312
ALUMINUM HULL PREPARATION
DETAILS FOR DELTA BOTTOM
EXHIBIT K



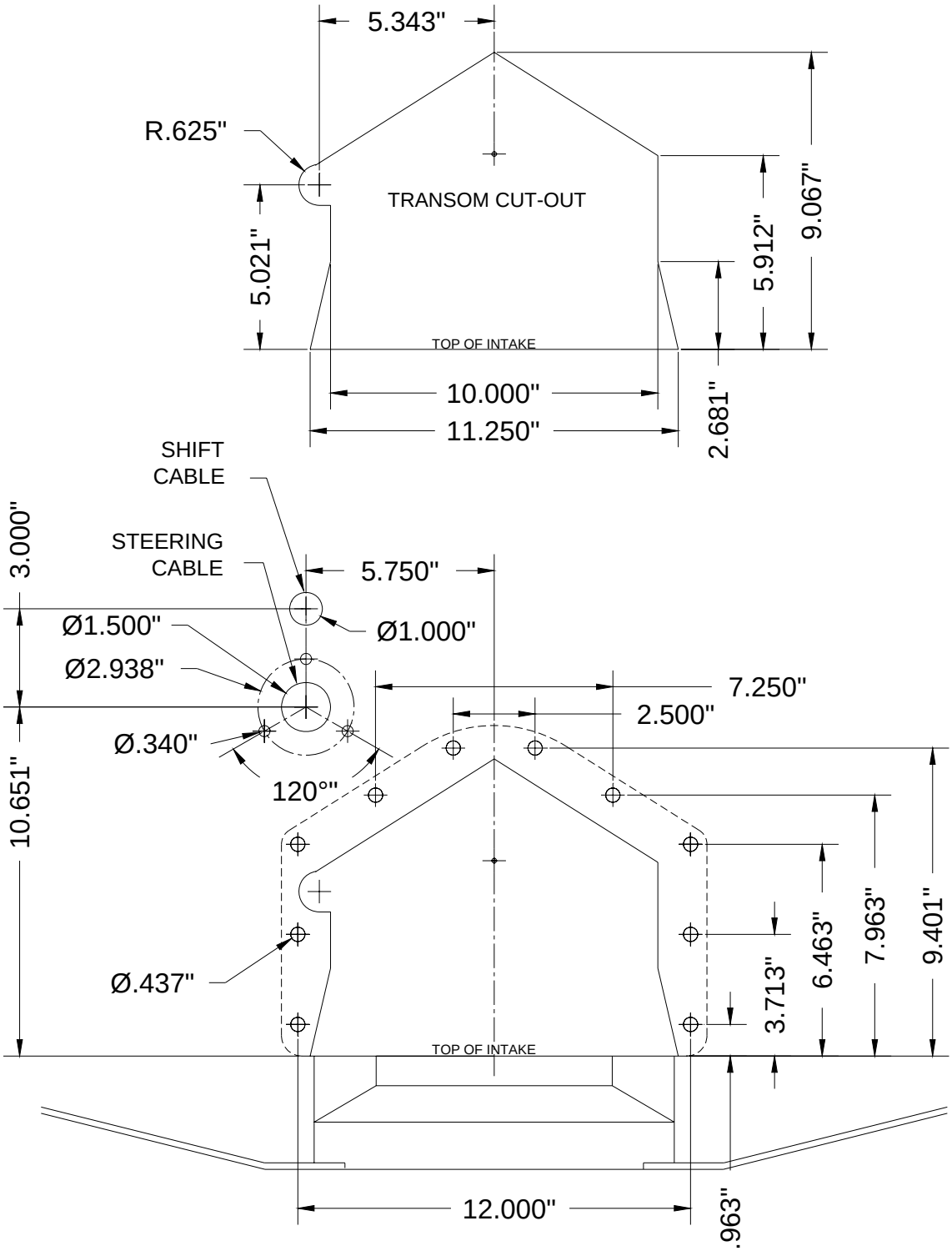
PELIMINARY TRANSOM CUT

AMERICAN TURBINE

TRANSOM LAYOUT SD-312

W / STANDARD STEERING

EXHIBIT L



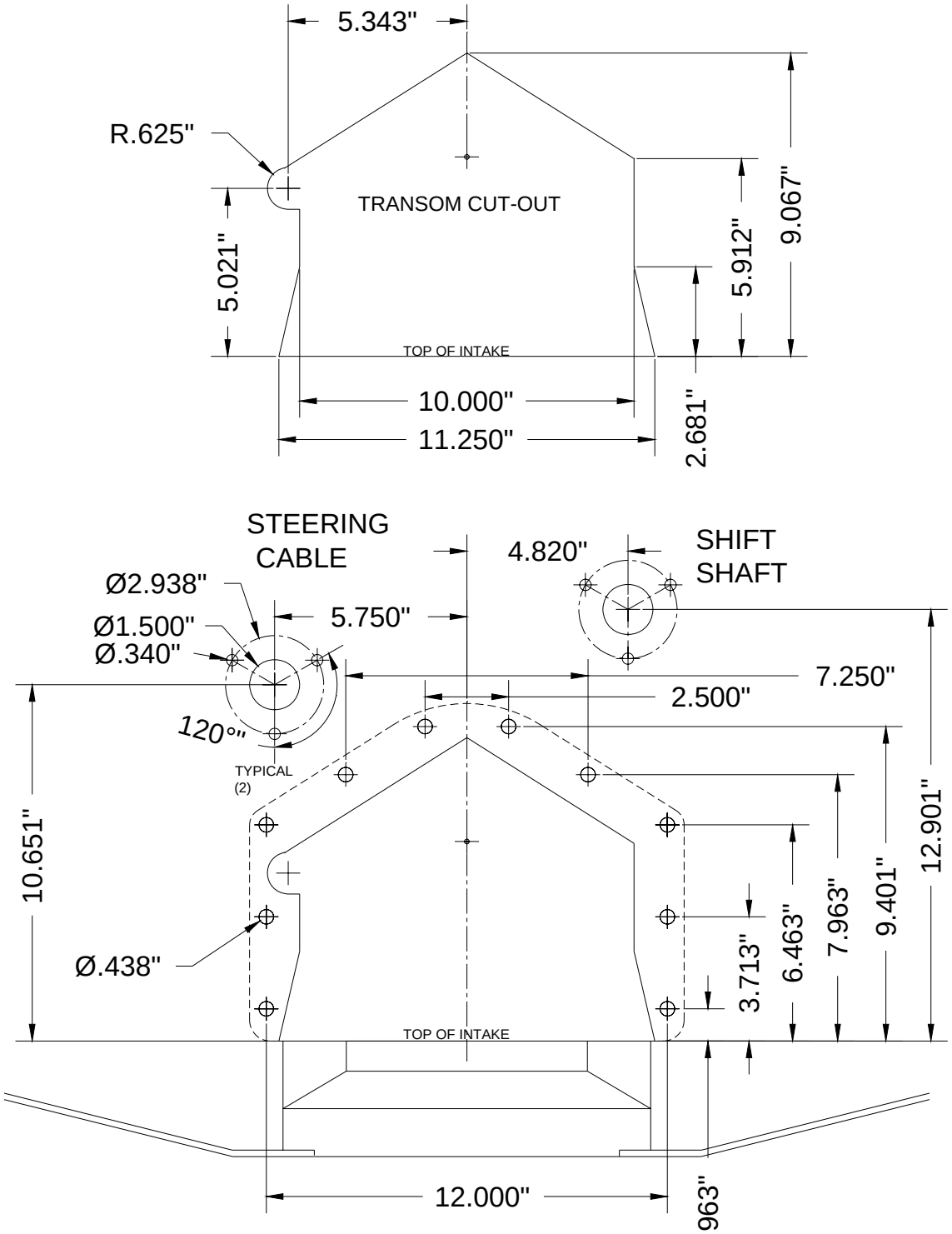
VIEW FROM OUTSIDE TRANSOM

AMERICAN TURBINE

TRANSOM LAYOUT SD-312

W / HTR II

EXHIBIT M



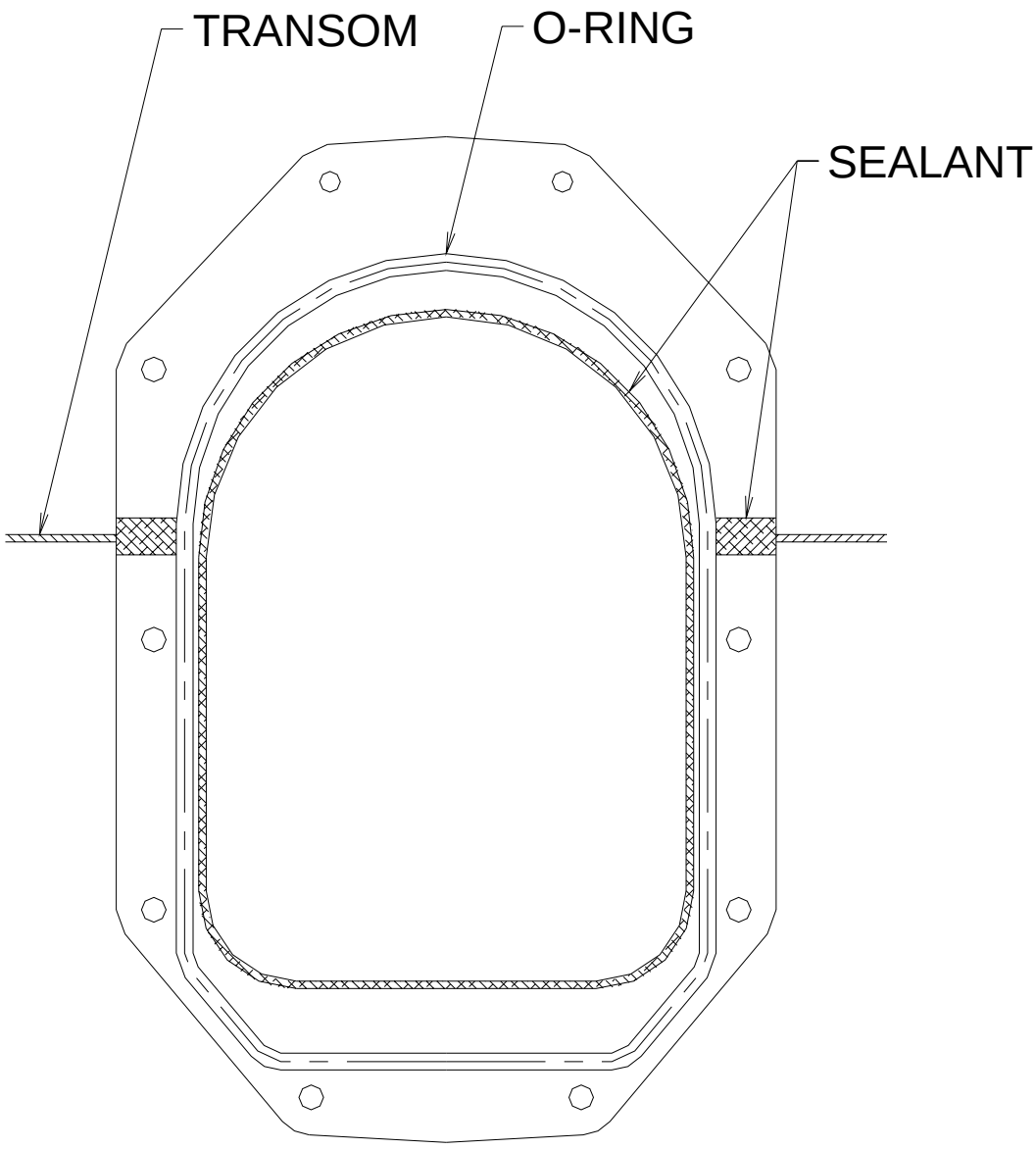
VIEW FROM OUTSIDE TRANSOM

AMERICAN TURBINE

SEALANT PLACEMENT

SD-312

EXHIBIT N

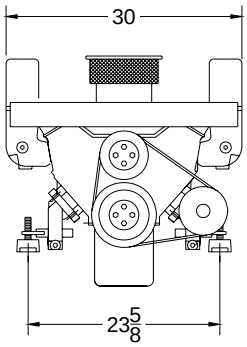


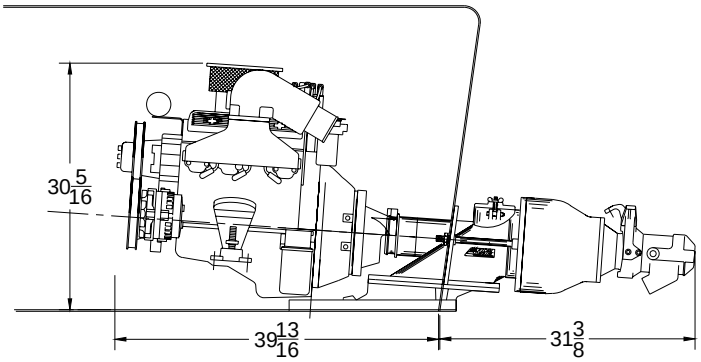
AMERICAN TURBINE

CHEVY ENGINE & JET DIMENSIONS

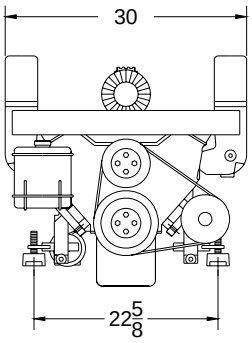
W / SD-309 - SD-312

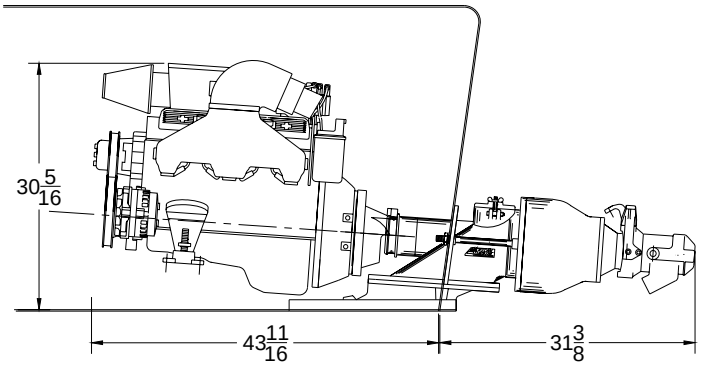
4.3L Chevy SD309/ SD312



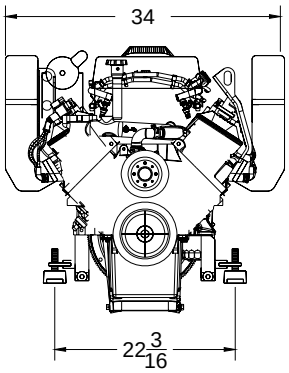


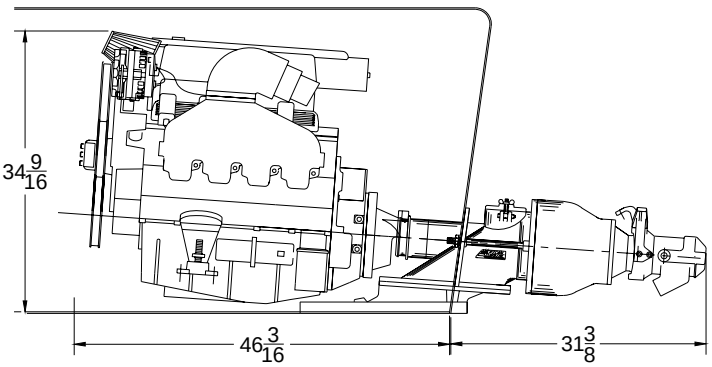
5.7L Chevy SD309/ SD312





8.1L. Chevy SD309/ SD312





Engine Dimensions are for reference only. Check with your engine supplier for current updates.

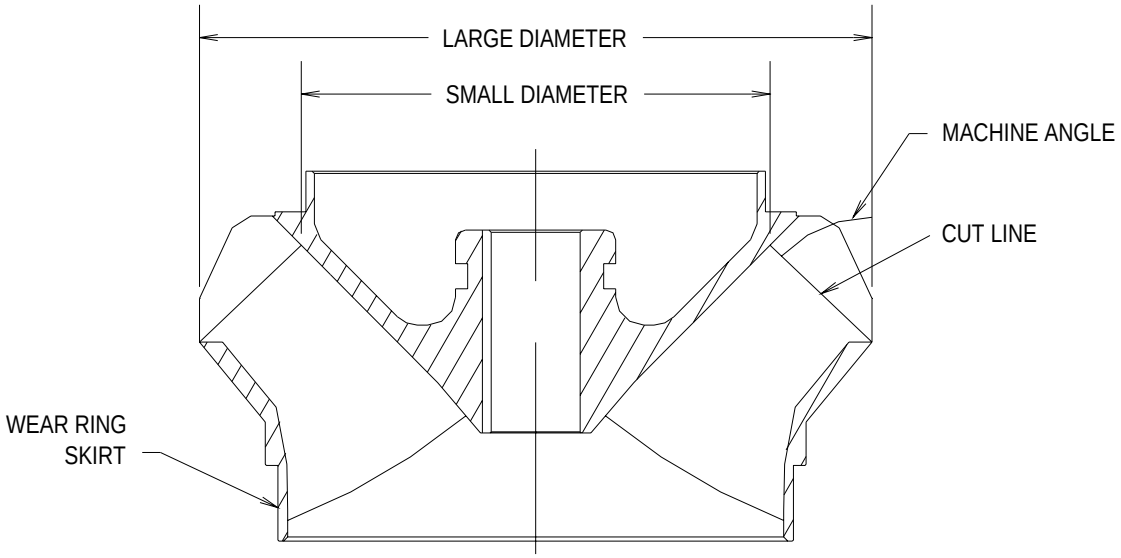
Close Couple Kits may be purchased with your KEM (Kodiak) engines to reduce the engine length by 4-5 inches.

AMERICAN TURBINE

IMPELLER SELECTION CHART

AT, TJ, SD-309, DOMINATOR, BERKELEY, ENERGIZER KITS

H.P.	9.5	9.25	AA	A	B	C
150	2900	3050	3200	3600	3800	4050
200	3200	3350	3500	4000	4200	4450
250	3450	3600	3700	4300	4500	4800
300	3800	3950	4050	4550	4800	5100
350	4050	4200	4300	4750	5100	5350
400	4250	4400	4500	5050	5300	5600
450	4450	4600	4700	5250	5500	5850
500	4650	4800	4950	5400	5700	6050
550	4800	4950	5100	5550	5850	N/A
***THESE RPM VALUES MAY VARY ACCORDING TO HOW YOUR BOAT ALLOWS THE PUMP TO LOAD						
HORSE POWER REQUIREMENTS ARE AT THE PUMP SHAFT						



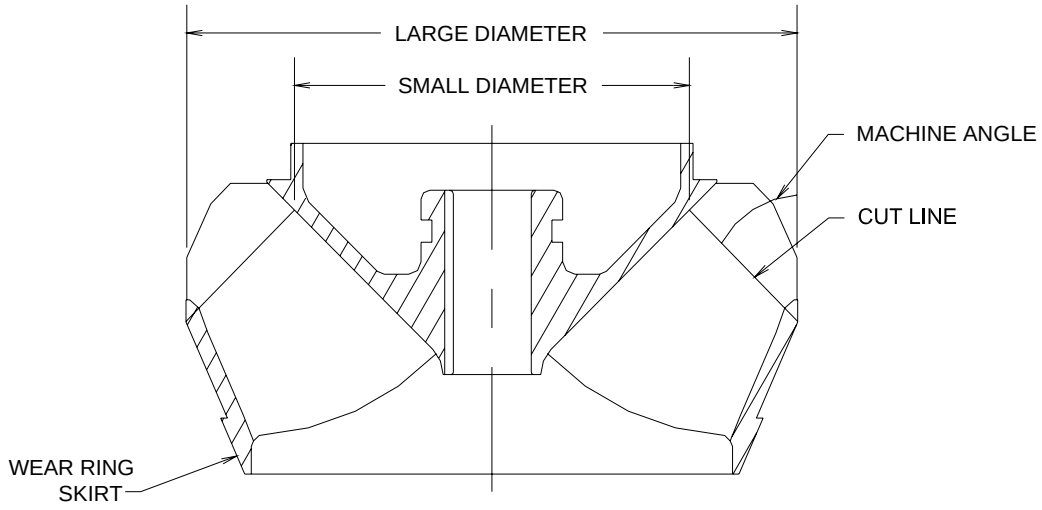
AMERICAN TURBINE JET DRIVE IMPELLER SPECIFICATIONS			
IMPELLER SIZE	**LARGE DIAMETER**	**SMALL DIAMETER**	**MACHINED ANGLE**
9 1/2"	9-1/2"	8-1/4"	25 DEGREES
9 1/4"	9-1/4"	8-1/4"	20 DEGREES
AA	9-3/32"	7-13/16"	25 DEGREES
A	9"	7-1/4"	30 DEGREES
B	8-3/4"	6-3/4"	33-1/2 DEGREES
C	8-1/2"	6-1/2"	33-1/2 DEGREES

AMERICAN TURBINE

IMPELLER SELECTION CHART

SD-312

H.P.	8.1S	8.1A	5.7S	5.7A	4.3S	4.3A
150	3075	3200	3350	3500	3650	3800
200	3400	3550	3700	3850	4000	4200
250	3650	3800	4000	4150	4300	4500
300	3850	4050	4200	4400	4575	4800
350	4050	4225	4450	4625	4825	5025
400	4250	4425	4625	4850	5025	5300
450	4475	4650	4800	5025	5250	5500
500	4575	4800	5000	5225	5415	5700
550	4725	4950	5175	5400	5600	5900
***THESE RPM VALUES MAY VARY ACCORDING TO HOW YOUR BOAT ALLOWS THE PUMP TO LOAD						
HORSE POWER REQUIREMENTS ARE AT THE PUMP SHAFT						



AMERICAN TURBINE JET DRIVE IMPELLER SPECIFICATIONS		
IMPELLER SIZE	**SMALL DIAMETER**	**MACHINED ANGLE**
8.1S	AS CAST	DEGREES
8.1A	7.878	26 DEGREES
5.7S	7.15	28 DEGREES
5.7A	6.95	28 DEGREES
4.3S	6.75	28 DEGREES
4.3A	6.57	28 DEGREES

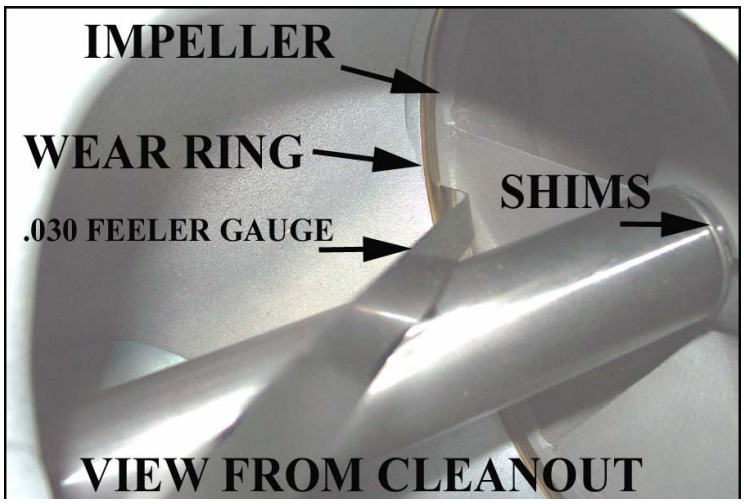
AMERICAN TURBINE

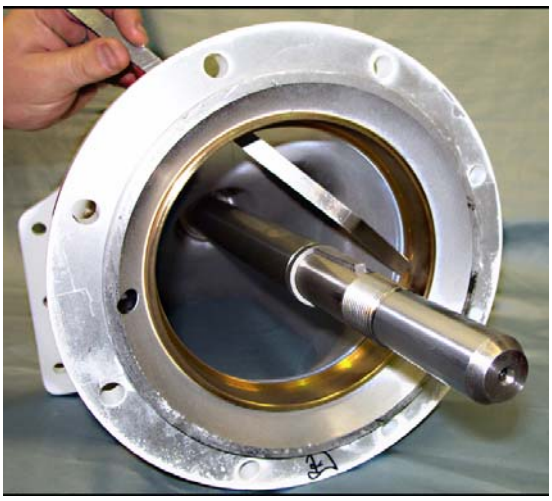
IMPELLER / WEAR RING SHIMMING INSTRUCTIONS

AT, TJ, SD-309, DOMINATOR, BERKELEY, ENERGIZER KITS

Tools Needed:

1. .030 Feeler Gauge
2. Propane Torch
3. Bent Screw driver
4. WD-40
5. Impeller Wrench
6. 3/4 Wrench
7. 9/16 Wrench
8. Dead Blow Hammer





To remove old wear ring:
Use a propane torch. Place the flame on the brass ring go around in a circular motion until the insulator starts to melt. Grab the ring with a bent over screwdriver (90deg.) and pull out. Clean up wear ring bore.

Installation:
Place wear ring in freezer for four hours. Place insulator in suction bore. Spray with WD-40. Start wear ring by hand. Tap wear ring in using a wooden block and a mallet. You may use an old impeller but it may bottom out on the shaft before seating the ring.

Important:
Wear ring must be seated square in the bore with-in 0.004" side to side.

The axial clearance between the impeller and the impeller shoulder must be 0.025"-0.035" (check several places around the wear ring). Check again after the impeller nut has been tightened.

Torque impeller nut to 70 ft/lbs. Torque bowl bolts to 50 ft/lbs.

AMERICAN TURBINE

IMPELLER / WEAR RING SHIMMING INSTRUCTIONS

SD-312

Tools Needed:

1. Feeler Gauge
2. Propane Torch
3. Bent Screw driver
4. WD-40
5. Impeller Wrench
6. 9/16 Wrench
7. Dead Blow Hammer
8. Wooden Block
9. Caliper
10. Straight Edge

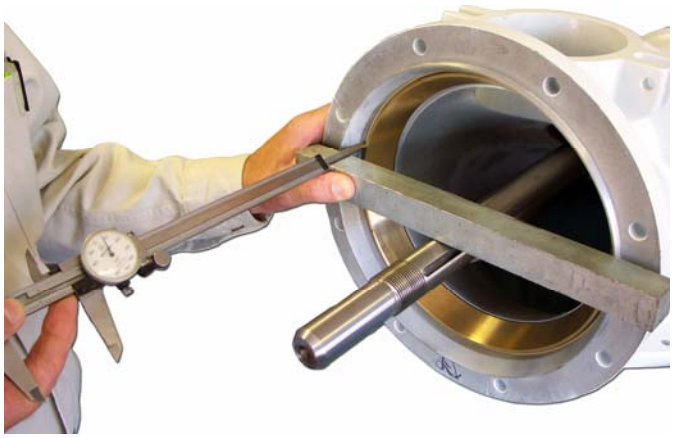


FIGURE 1

FIGURE 2

To remove old wear ring:
Use a propane torch. Place the flame on the brass ring go around in a circular motion until the insulator starts to melt. Grab the ring with a bent over screwdriver (90deg.) and pull out. Clean up wear ring bore.

Installation:
Place wear ring in freezer for four hours. Place insulator in suction bore. Spray with WD-40. Start wear ring by hand. Tap wear ring in using a wooden block and a mallet. You may use an old impeller but it may bottom out on the shaft before seating the ring. Do Not use impeller nut to pull impeller in.

Wear ring must be seated square in the bore with-in 0.004" side to side. Use dial caliper and straight edge as shown in FIGURE 1.

The axial clearance between the impeller and the wear ring must be 0.022"-0.024" (check at the top of the impeller as shown in FIGURE 2). Check again after the impeller nut has been tightened.

Torque impeller nut to 70 ft/lbs. Torque bowl nuts to 25-30 ft/lbs.

IMPORTANT: Do Not shim impeller tighter than 0.022". Severe damage can result.

AMERICAN TURBINE

UNDERSTANDING YOUR JET BOAT

Most boat owners like to perform at least a certain amount of their boat maintenance themselves to ensure continuing good performance and reliability.

To avoid unnecessary trips to the service center, it might be useful to have a checklist which can be run through systematically, in the hope of pinpointing the problem quickly. The boat can be divided into three categories - jet unit, engine, and hull.

If something is "wrong" with the boat it is usually poor acceleration and load carrying, coupled with excessive fuel consumption or engine RPM's. It could be unusual noise coming from the mechanicals, or possibly just poor top speed. All of these things may be present to some degree, but the usual complaint is that the boat is just plain "gutless".

TACHOMETER

The most important single instrument on the boat when considering performance drop-off is the engine tachometer. The great thing about jet boats is that the engine RPM's should remain the same throughout the life of the boat, regardless of age, loading, water conditions, towing, whatever.

There is no situation where the RPM's should be different from when the boat was new, and as an owner, you will know what these are. At any time, you should be able to open the throttle fully and get exactly the same maximum reading you have been used to. Or perhaps you are finding it needs more RPM's to cruise your normal load? RPM's are a most important indicator of proper operation of the boat.

It is important at this stage to feel confident that your tachometer is reading accurately.

Now we come to our check list, and determination of which major area is the problem. The simplest way is a check on the RPM's first. They could be normal, high, or low, and this will pin point the place to look:

A. Normal maximum RPM = hull problem.

If the boat is performing poorly and the maximum RPM's are normal and what you are used to, you can look to the hull and some of the external parts. These include:

1. *Overload:* Too much weight aboard.
2. *Balance:* Either too much weight aft, which will cause the nose to be too high and make planing difficult, or if the weight is too far forward, it will cause the nose to plow, difficult steering, wetness, and poor top speed.
3. *Reverse bucket:* Is the bucket dragging in the reverse stream? Make sure the control is fully up.
4. *Excessive hull drag:* Is there some external hull obstruction such as rough surface, broken keel strips, or other reason impeding the smooth flow of water over the hull bottom? A visual check on the trailer should reveal if there is. Metal hulls can have a "hook" bashed into them forward of the transom which can cause the bow to plow. The planing surface forward of the transom six to nine feet should be true and flat.

B. High rpm = jet unit problem.

Higher than normal RPM's, lack of thrust, slipping clutch feel, engine racing and no go?

1. *Blockage:* The most common problem is weeds and stones blocking the intake grate. Also be aware of ski rope, fishing line and plastic bags winding around the pump shaft. Small sticks and stones can become lodged in the impeller affecting the performance dramatically, objects trapped in the impeller can cause the rotating assembly to be out of balance, causing severe vibration. Make sure the water passage through the jet is clear.
2. *Impeller wear:* The heart of the jet is the impeller, and its condition. If you run in shallow gravel beds or across sand bars the leading edges will become dull and inefficient. Pumping sand will increase the wear-ring to impeller clearance. Causing cavitation and loss of performance.
3. *Bowl / stator vanes:* Its not too much of a problem, but the leading edge of the fixed stator vanes can become blunt and damaged.
4. *Air leaks:* If excessive air leaks into the intake ahead of the impeller, the jet unit will "slip". Possible sources of air leaks are though a faulty gland seal, which is usually accompanied by a static water leak into the boat when standing idle.

So if the gland is worn out and leaking into the boat with the engine off, it can also suck air when accelerating on to plane, and if this happens, then the thrust is reduced dramatically. Air can also be introduced into the system via the inspection cover, so you will want to make sure the cover is tight.

UNDERSTANDING YOUR JET BOAT (CONT.)

C. Low RPM = engine problem

There is generally no way the jet unit can overload the engine and bring the RPM's down. If the RPM's are down from usual, it is almost certain to be a engine problem. A compression check will usually reveal leaking piston rings or valves, but the most common reasons for reduced engine power are:

1. *Throttle:* Check that the throttle is opening fully.
2. *Fuel:* The fuel supply must be adequate for the engine size. Racing boats frequently have a fuel pressure gauge which is, with the tachometer, probably the most important engine instrument. Sufficient fuel must be reaching the engine.
3. *Air to the engine:* The carburetor must be getting its full quota of cool air. If the engine has to work to get adequate air, and if it is hot air, this will reduce power.
4. *Ignition spark:* Be satisfied the ignition system is operating properly. A problem here is usually indicated by a rough running or missing engine.
5. *Exhaust:* Check for a free flowing exhaust system. Some silencers can become blocked, rubber hoses disintegrate internally, or there is excessive water injection. Such things can cause excessive back pressure and reduce power.

Provided your engine is getting its full quota of air and fuel, and is getting enough spark and at the right time, the engine will usually be OK, and maximum RPM's will result. However if the RPM's are down and you believe the tachometer, look for an engine problem.

The hull, engine, and jet unit are the three main areas to look at when your performance is down.

D. Excessive noise.

This can often be a concern even if there is not a reduction in performance. The most common causes of noise are:

1. *Cavitation:* The jet unit is starved for water, and usually sounds like a rattle or a can of loose bolts in the back of the boat. Most likely a blocked intake grate.
2. *Moan or whine:* The jet unit can exhibit some "turbine whine" not unlike a turbocharger noise but you will know what is usual with your boat. However, if you have a new more obvious moan/whine, especially if it is a very low frequency grumble at idle, that increases with engine RPM's then it is likely to be a rough/worn/water damaged thrust bearing. If water has gotten into the bearing, it is usually as a result of a flooded bilge at some time on a warm bearing, then water can be sucked in as it cools.
3. *Periodic vibration:* Often at specific RPM's and disappearing at other throttle openings is probably a torsional vibration emanating most likely from the universal joints on the drive shaft.

Check them for worn/slack joint needle rollers, or if they have been installed incorrectly after an overhaul.

AMERICAN TURBINE

INSTALLATION AND INSPECTION

IMPORTANT: No modifications are to be made to the Jet-Drive without prior written permission from American Turbine, Inc. American Turbine jets are designed to propel watercrafts up to 50 mph without special modifications and safety equipment. For watercraft speeds above 50 mph the dealer or boat manufacturer must include the proper equipment and insure the operator has the proper instruction.

PRE-DELIVERY INSPECTION

The following inspection should be performed prior to jet drive operation. The same inspection should be performed by the user or selling dealer after the first 10- 20 hours of use and regularly thereafter every three months. If any items of the inspection list do not meet inspection guidelines, they should be corrected before using the jet drive.

1. **Hand Hole Cover.** Check to make sure that the hand hole cover is tightly fastened.
2. **Steering.** Check the steering by rotating the wheel right and left with the engine off and verify that the nozzle turns completely against the housing to which it is attached. Check all steering cable connections. These include the transom housing steering nut, the tiller arm-to steering tube connection, the tiller shaft set screw and the lower nozzle pin cap screw.
3. **Reverse Shift Control.** With the control in full reverse, the reverse bucket should be camped down tight against the nozzle and completely cover the nozzle's discharge opening. In full forward, the reverse bucket should clear the entire nozzle discharge opening. In neutral, the reverse bucket should cover about 3/4ths of the discharge opening. The reverse bucket controller should have a provision to lock it in the forward position so that the bucket cannot fall into the water stream.
4. **Throttle.** Check to see that the throttle is operating smoothly. On boats with a single lever control, the shift must be complete before the engine RPM 's increase.
5. **Transom Seals.** There should be no leaks at the housing seal to the boat or the housing seal to the bowl.
6. **AT-309 & TJ-309 Packing Gland Inspection.** The packing gland should be inspected and adjusted if necessary. With the boat in the water and the engine running, tighten the packing gland nuts equally. Excessive tightening of the gland will result in heat damage to the shaft. Excessive leakage of the gland can result in poor low speed acceleration and possible water damage to the boat engine**.**
7. **SD-309 & FW-309 Weep Hole Inspection.** A weep hole is provided to indicate the condition of the mechanical seal. Water running out the hole is an indication of a failed seal or that there is a foreign debris between the seal faces i.e. fishing line. A blast of compressed air in the weep hole will sometimes clear the obstruction. If it continues to leak, consult the manufacturer.
8. **Engine Cooling Connections.** Check to make sure all hose connections are tight.

BOLT and NUT TORQUE SPECIFICATIONS

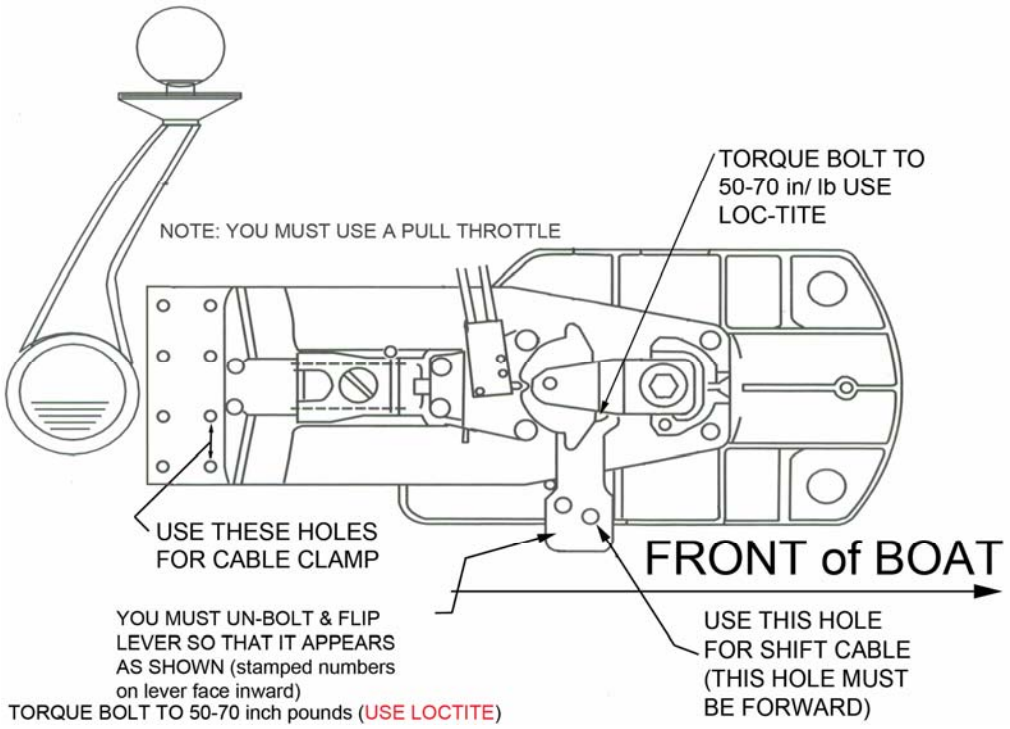
CHECK ALL FASTENERS BEFORE TESTING OR DELIVERLY

1/4" BOLTS	10 ft/LB
5/16" BOLTS	20 ft/LB
3/8" BOLTS	25 ft/LB
1/2" BOLTS	70 ft/LB
5/8" BOLTS	70 ft/LB
5/16" WINGNUT	FINGER TIGHT PLUS ½ TURN
3/8" WINGNUT	FINGER TIGHT PLUS ½ TURN

AMERICAN TURBINE

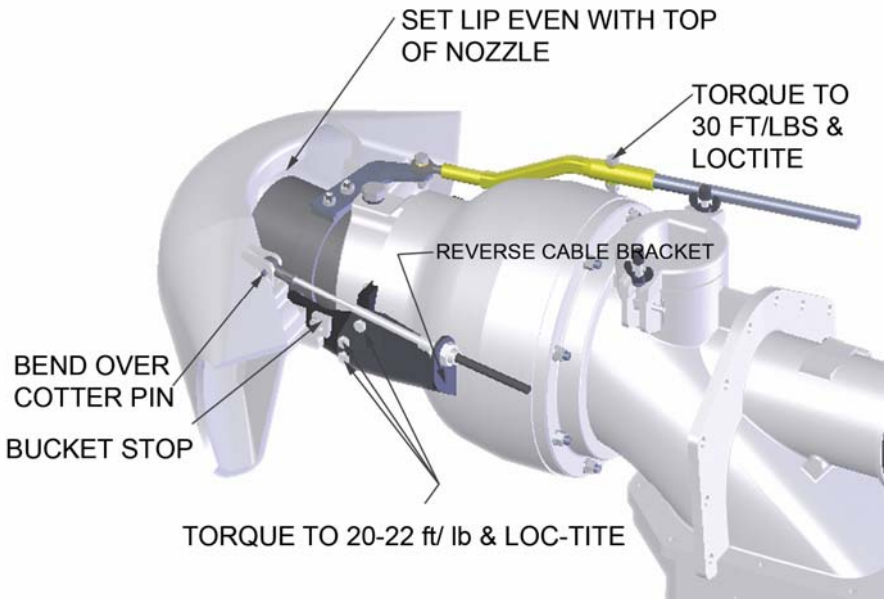
SDR INSTALL INSTRUCTIONS

FOR TELEFLEX SPORTJET SHIFTER - MODEL # 311508



PROCEDURE:

1. BOLT ON STEERING ASSEMBLY SO IT APPEARS AS SHOWN INCLUDING THE REVERSE CABLE BRACKET.
2. MAKE CHANGES TO SHIFTER AS SHOWN ABOVE.
3. PLACE SHIFTER IN REVERSE.
4. RUN REVERSE CABLE THRU CABLE BRACKET.
5. SCREW ON ROD END, FASTEN TO REVERSE BUCKET WITH CLEVIS THEN USE COTTER PIN TO RETAIN.
6. PLACE SHIFTER IN REVERSE. ADJUST JAMB NUTS ON CABLE CONDUIT SO THAT BUCKET IS TIGHT AGAINST THE BUCKET STOP.
7. CONNECT STEERING EXTENSION AND CENTER STEERING WHEEL BY ROTATING THE WHITE PLASTIC BALL ON THE STEERING TUBE (LOOSEN BALL BEZEL FOUR SCREWS).

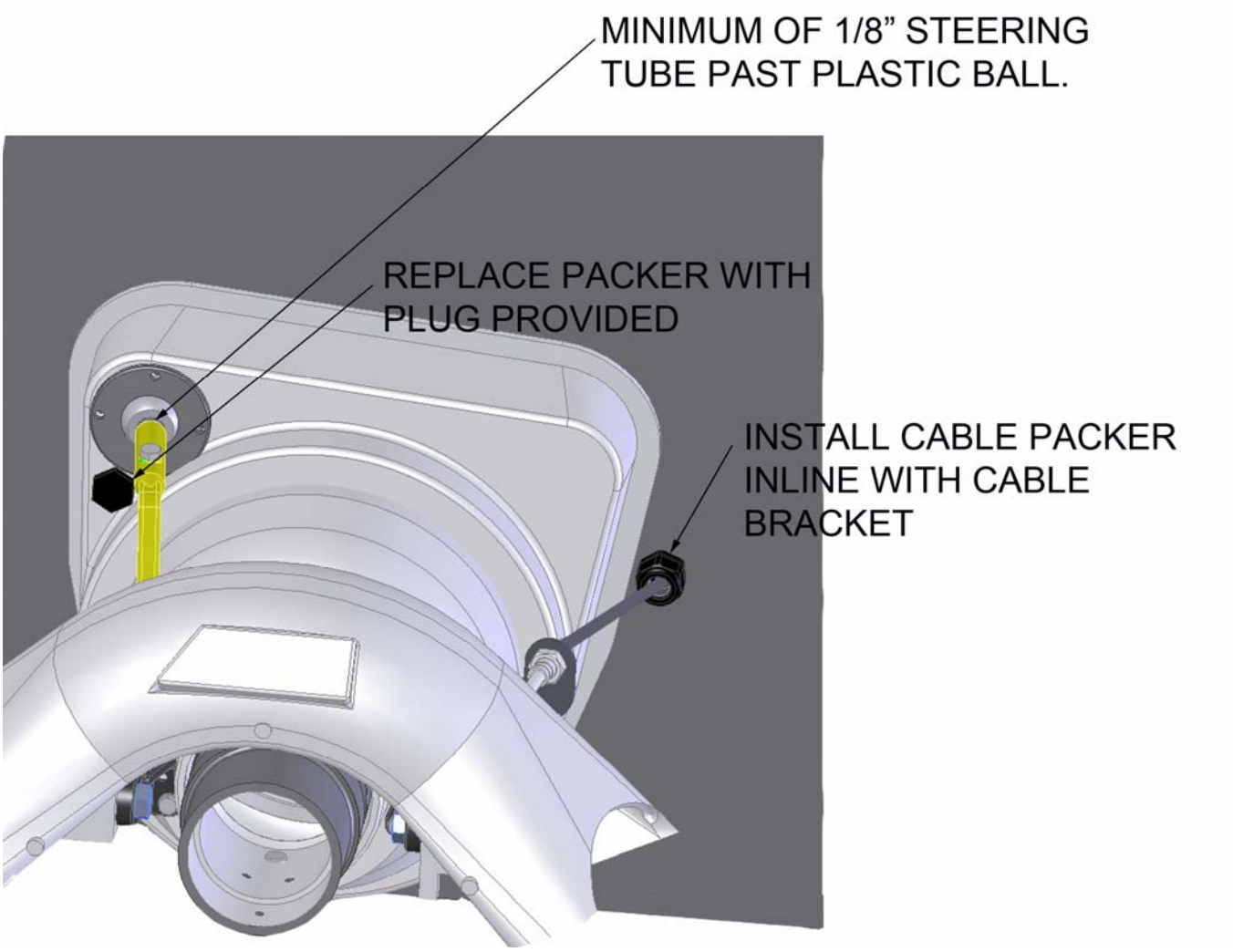


AMERICAN TURBINE

SDR INSTALL INSTRUCTIONS
FOR TRANSOM HOUSING

PROCEDURE

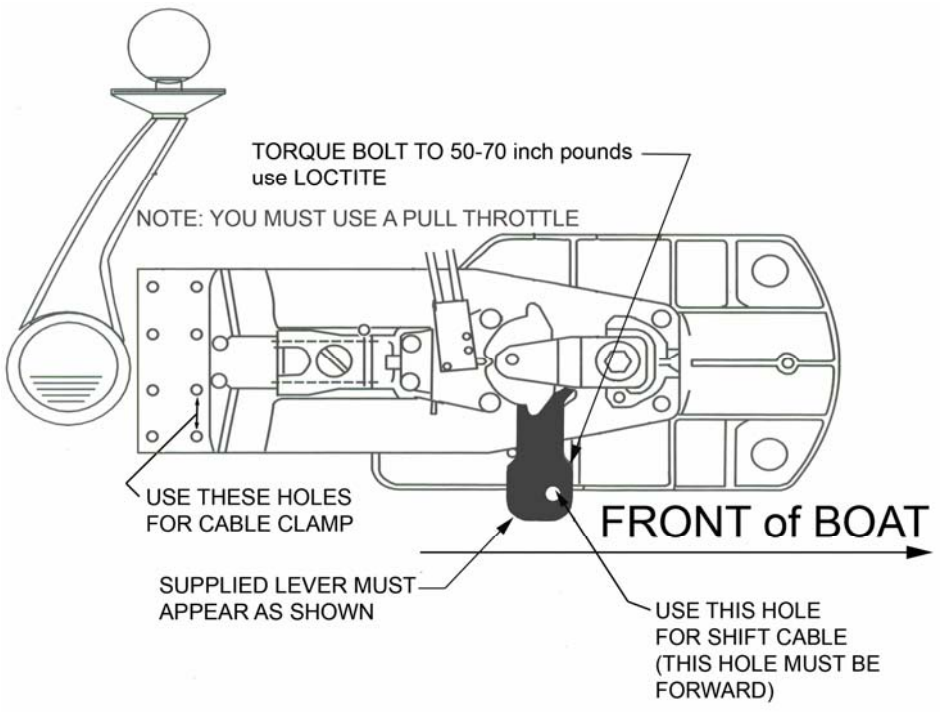
1. Install studs into bowl approx. 5/8”. Bolt on assembly with nuts and lock washers.
2. Un-screw steering tube from plastic ball. Screw the long threaded end of the tube into the ball.
3. Connect the steering cable to the short threaded end of the steering tube.
4. To center the steering wheel screw the plastic ball in or out. The steering tube must come through the ball at 1/8”.
5. You must change to a pull throttle.


MINIMUM OF 1/8” STEERING TUBE PAST PLASTIC BALL.
REPLACE PACKER WITH PLUG PROVIDED
INSTALL CABLE PACKER INLINE WITH CABLE BRACKET

AMERICAN TURBINE

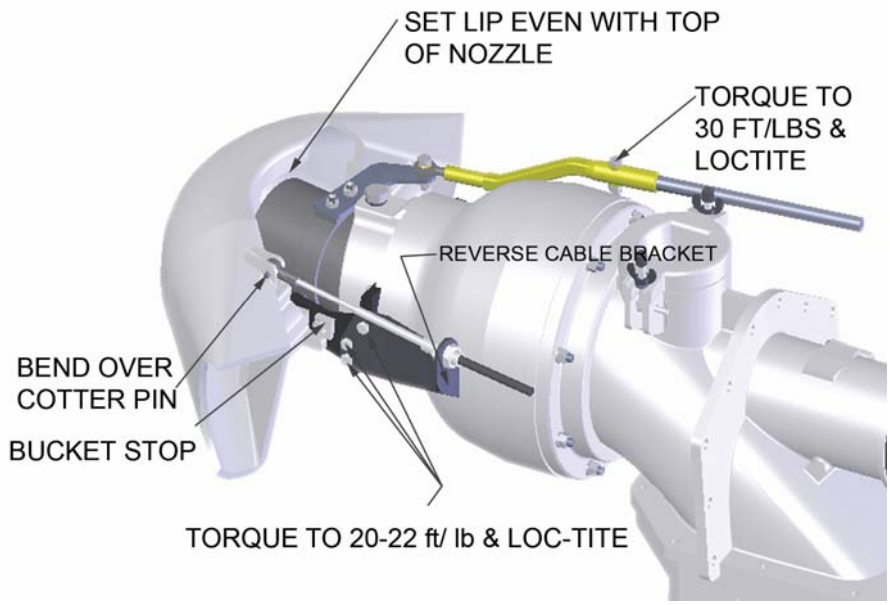
SDR INSTALL INSTRUCTIONS

FOR OTHER THAN TELEFLEX SPORTJET SHIFTER - MODEL # 311508



PROCEDURE:

1. BOLT ON STEERING ASSEMBLY SO IT APPEARS AS SHOWN INCLUDING THE REVERSE CABLE BRACKET.
2. MAKE CHANGES TO SHIFTER AS SHOWN ABOVE.
3. PLACE SHIFTER IN REVERSE.
4. RUN REVERSE CABLE THRU CABLE BRACKET.
5. SCREW ON ROD END, FASTEN TO REVERSE BUCKET WITH CLEVIS THEN USE COTTER PIN TO RETAIN.
6. PLACE SHIFTER IN REVERSE. ADJUST JAMB NUTS ON CABLE CONDUIT SO THAT BUCKET IS TIGHT AGAINST THE BUCKET STOP.
7. CONNECT STEERING EXTENSION AND CENTER STEERING WHEEL BY ROTATING THE WHITE PLASTIC BALL ON THE STEERING TUBE (LOOSEN BALL BEZEL FOUR SCREWS).



AMERICAN TURBINE

UPGRADING SD-309 & SD-312 STANDARD STEERING TO HTR II

1. Remove steering nozzle assembly.
2. Remove steering cable bezel (optional)
3. Remove original shift cable.
4. Remove original throttle / shifter.
5. Drill holes in transom as shown in (Exhibit I). Existing steering cable bezel may not have to be removed.
6. Bolt steering assembly to bowl using bottom two bolts.
7. Bolt port side pivot bracket (41) and starboard side pivot bracket (33) to steering assembly as shown in the (Exploded View AA).
8. Finish installing fasteners into steering assembly torque all to 20-25 ft/lbs.
9. Install reverse bucket (60). Slide washer (73) and sleeve (37) over bolt (35) use high strength loc-tite. Thread into pivot brackets torque to 50-55 ft/lbs.
10. Bolt shift shaft bezel assembly (Exhibit J) to transom (plastic ball has no threads) use sealant.
11. Bolt steering cable bezel assembly (Exhibit K) to transom (plastic ball has threads) use sealant. (You may retain the original if the location does not interfere).
12. Insert shift shaft (48) into bezel. Machined flat on shaft is outside the transom.
13. Slide white plastic collar onto shift shaft.
14. Slide reverse lever arm (50) onto shift shaft. Orient as shown in (Exhibit L)
15. Insert shift shaft into pivot bracket (33)
16. On the inside of the transom remove the top two nuts on the suction piece flange (Exhibit M).
17. Install rod brake assembly as shown in (Exhibit N).
18. Connect lock housing (13) to shift lever arm (22). Insert lock hub (12) into lever use high strength loc-tite. Use sparingly as excessive amounts will foul proper operation. Torque to 20 ft/lbs. (Exploded View AA)
19. Insert steering cable into steering cable bezel assembly (Exhibit K).
20. Tighten cable nut onto steering tube (45) make sure cable housing is tight against steering tube.
21. Slide steering extension (71) onto cable. Fasten w / bolt & locknut provided. Torque to 25 ft/lbs.
22. Insert steering extension (71) into clevis (70). Fasten w / bolt & locknut provided. Torque to 20 ft/lbs.
23. To center steering wheel remove ball flange (31). Adjust steering tube ball (46) to center steering wheel. Replace ball flange (31). Torque bolts to 6-7 ft/lbs. (Exhibit K).
24. Connect the push-pull rod (55) to the reverse bucket (60) by inserting bolt (56) into male rod end (57), tapered sleeve (58) and then into hole in reverse bucket. Fasten w / locknut (59) and torque to 20 ft/lbs. (Exhibit L)
25. Slide reverse lever arm (50) along shift shaft (48) so that it is parallel with push-pull rod (55). Tighten taper pin (51) 15 ft/lbs. (Exhibit L)

AMERICAN TURBINE

UPGRADING SD-309 & SD-312
STANDARD STEERING TO HTR II (CONT.)

26. Install shifter / throttle per manufacturer directions.
27. Connect shift cable to shifter per manufacturer directions.
28. Connect shift cable to rod brake assembly using 64 series cable clamp (4) and fasteners provided. Attach cable to control rod bracket (3). Use holes closest to center of boat. (Exhibit M)
29. Adjusting reverse bucket. Move lock housing as far to the left as possible (make sure reverse bucket is not contacting the steering nozzle (63). With one nut threaded all the way up on the end of the shift cable, insert the shift cable into the lock housing (13). Pull the shift lever all the way into reverse. Place nut onto end of shift cable. Use removable loc-tite. Tighten both nuts against lock housing (13). Adjust reverse bucket to "just" clear steering nozzle (63). Disconnect the push-pull rod (55) from reverse lever arm (50). Turn push-pull rod in and out so that reverse bucket "just" clears steering nozzle when turned lock to lock. Push shift lever full forward. Check if reverse bucket completely clears steering nozzle. Pull shift lever into full reverse. Check that push-pull rod (55) is resting against shift shaft (48).

Operation of HTR II steering

This system is known as reverse sense steering i.e. backing of a boat with this system will be opposite of backing an automobile.

The easiest way to learn how to back is to turn the steering wheel in the same direction as you want the bow to go.

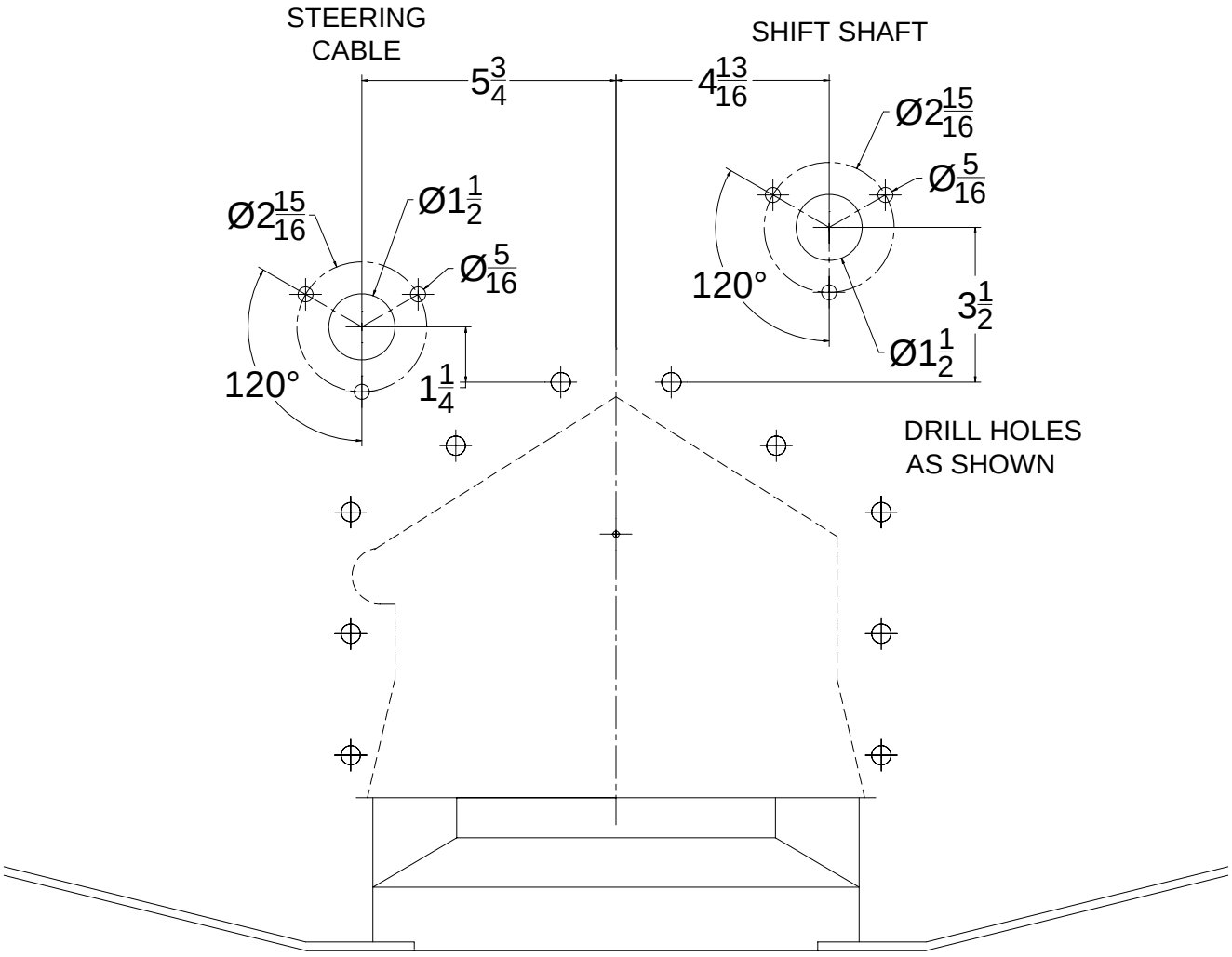
Once you have a little "seat time" you will be able to do things with your boat that no other system can do.

You can make counter clockwise or clockwise turns without advancing the boat.

Note: Never increase the throttle without bucket in full reverse. These boats are not equipped with a neutral lockout. Always make sure the throttle is in the idle position and the shifter is in the neutral position before starting.

Always hold the shifter in the neutral position when starting.

AMERICAN TURBINE



VIEW FROM REAR

EXHIBIT I

AMERICAN TURBINE

SHIFT SHAFT BEZEL ASSEMBLY

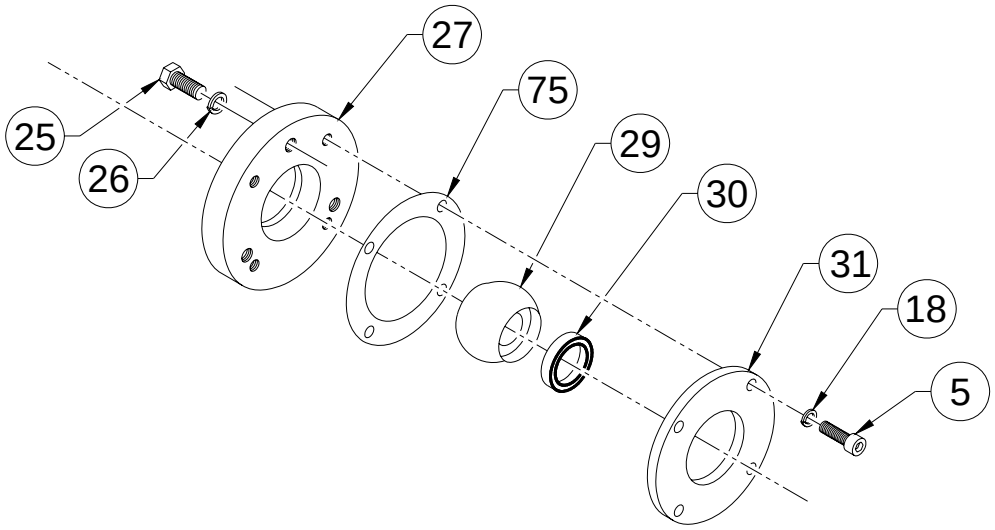


EXHIBIT J

STEERING CABLE BEZEL ASSEMBLY

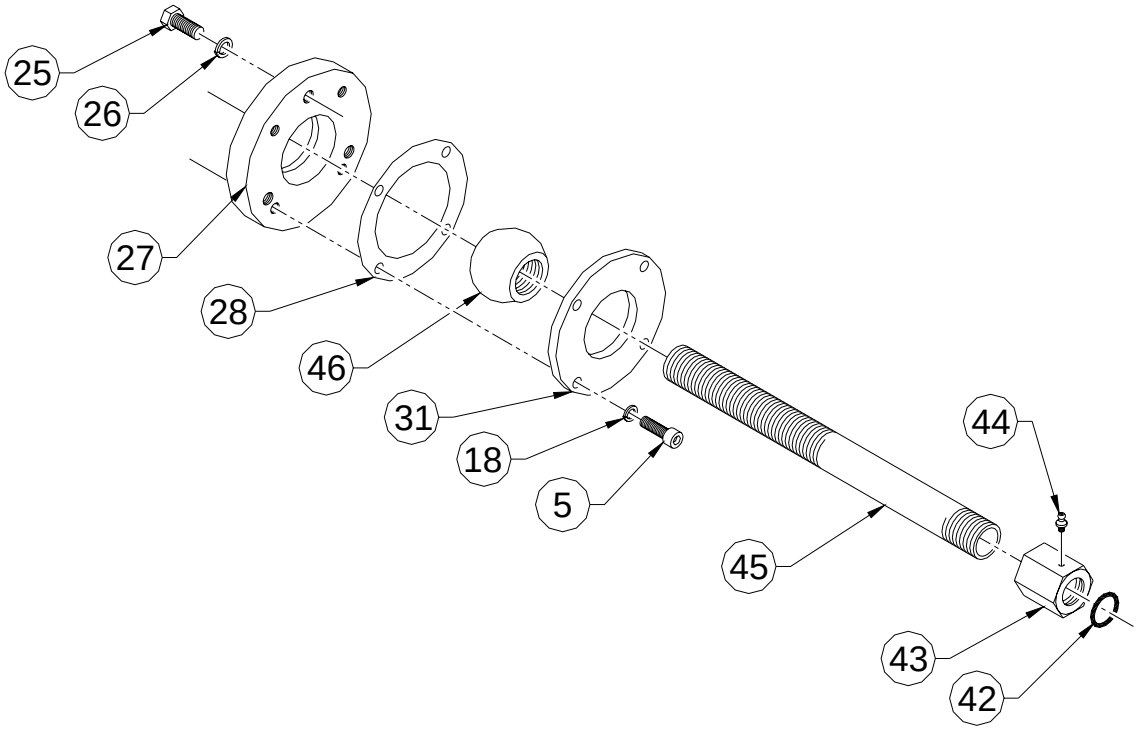


EXHIBIT K

AMERICAN TURBINE

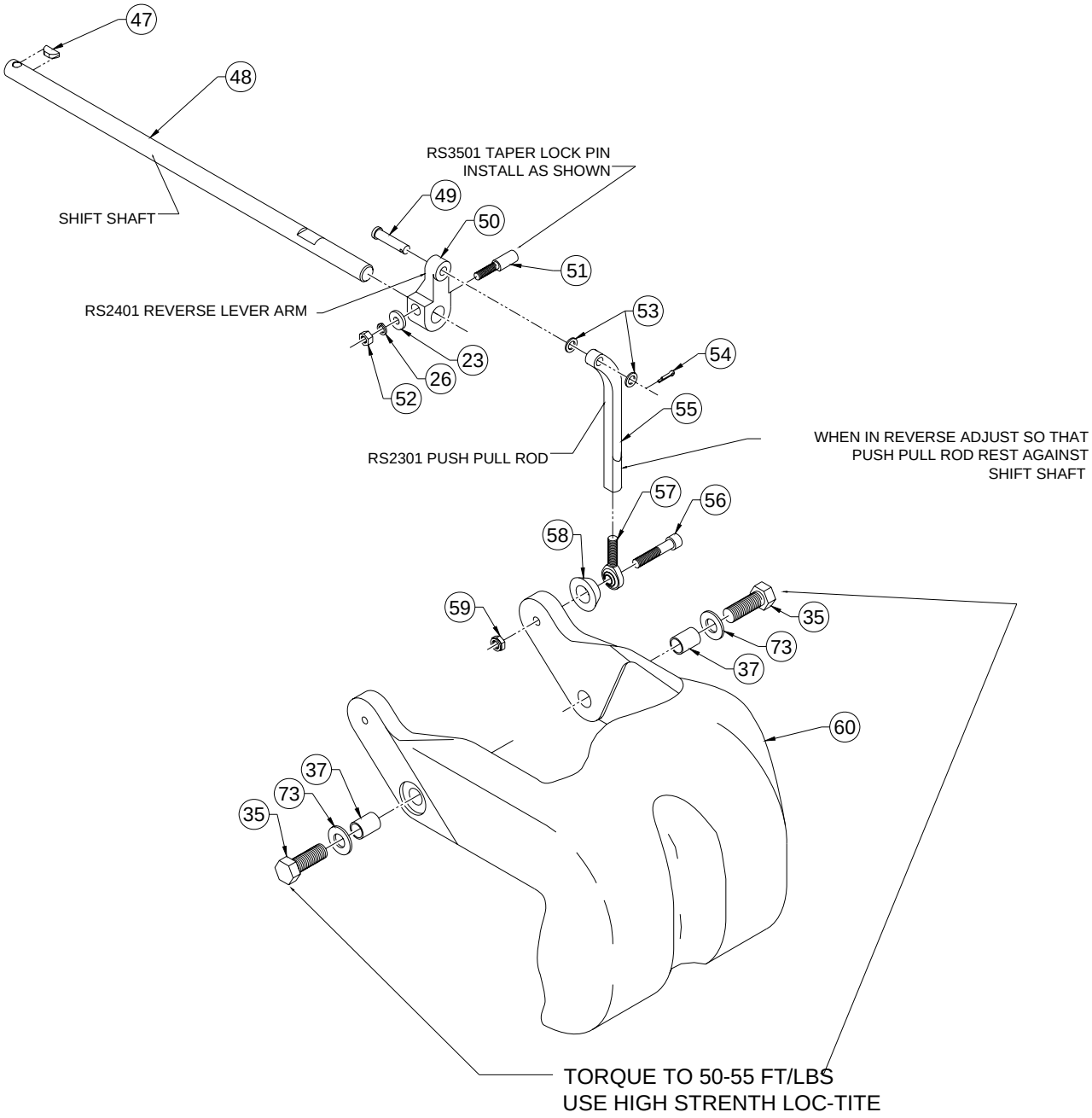


EXHIBIT L

AMERICAN TURBINE

BRAKE ROD ADJUSTMENTS

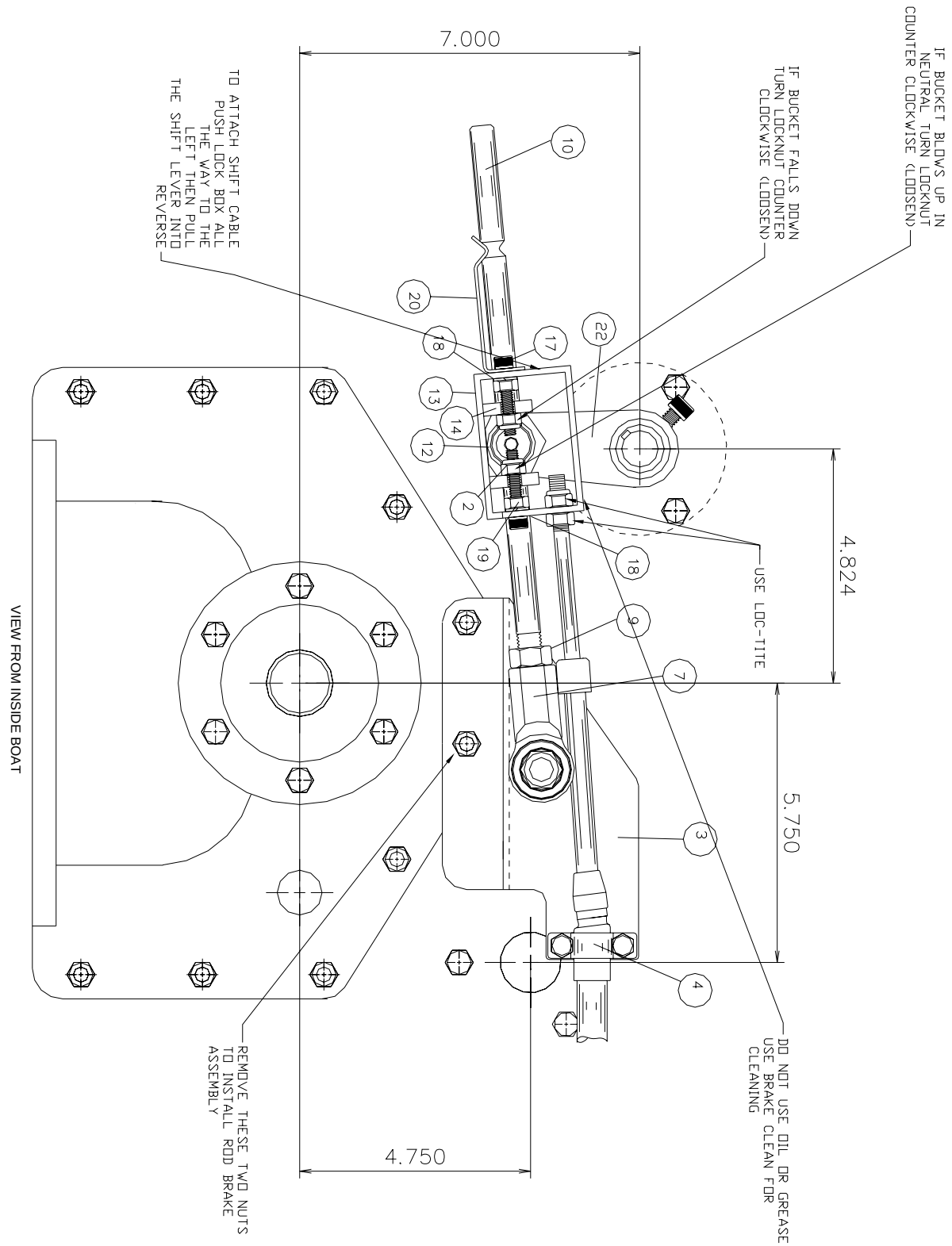
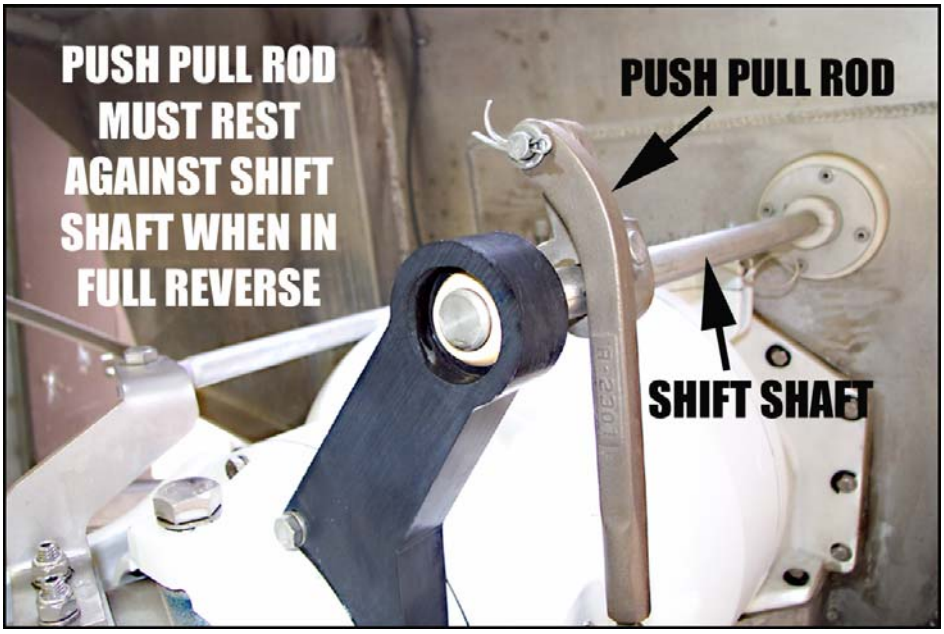
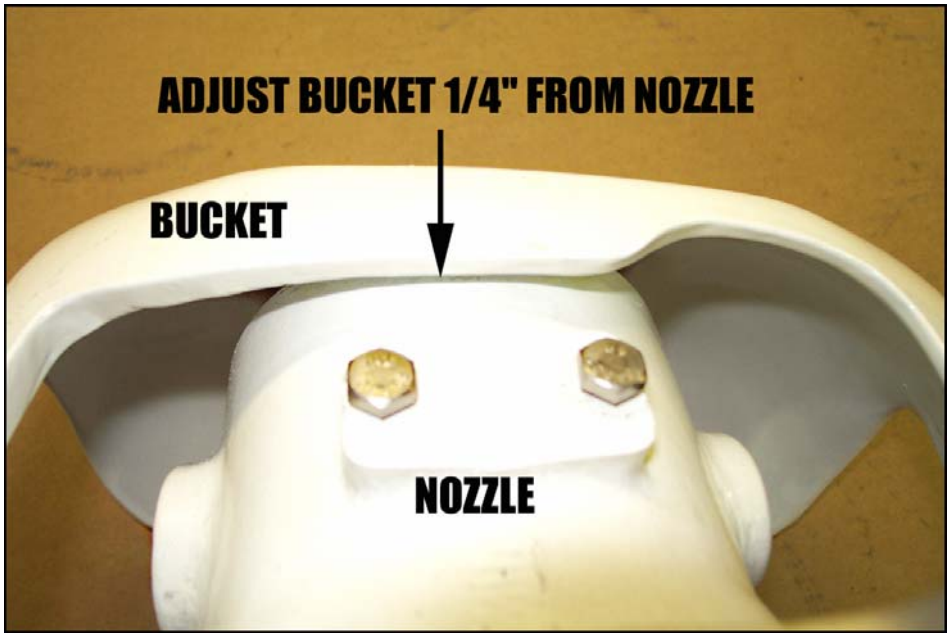


EXHIBIT M

AMERICAN TURBINE

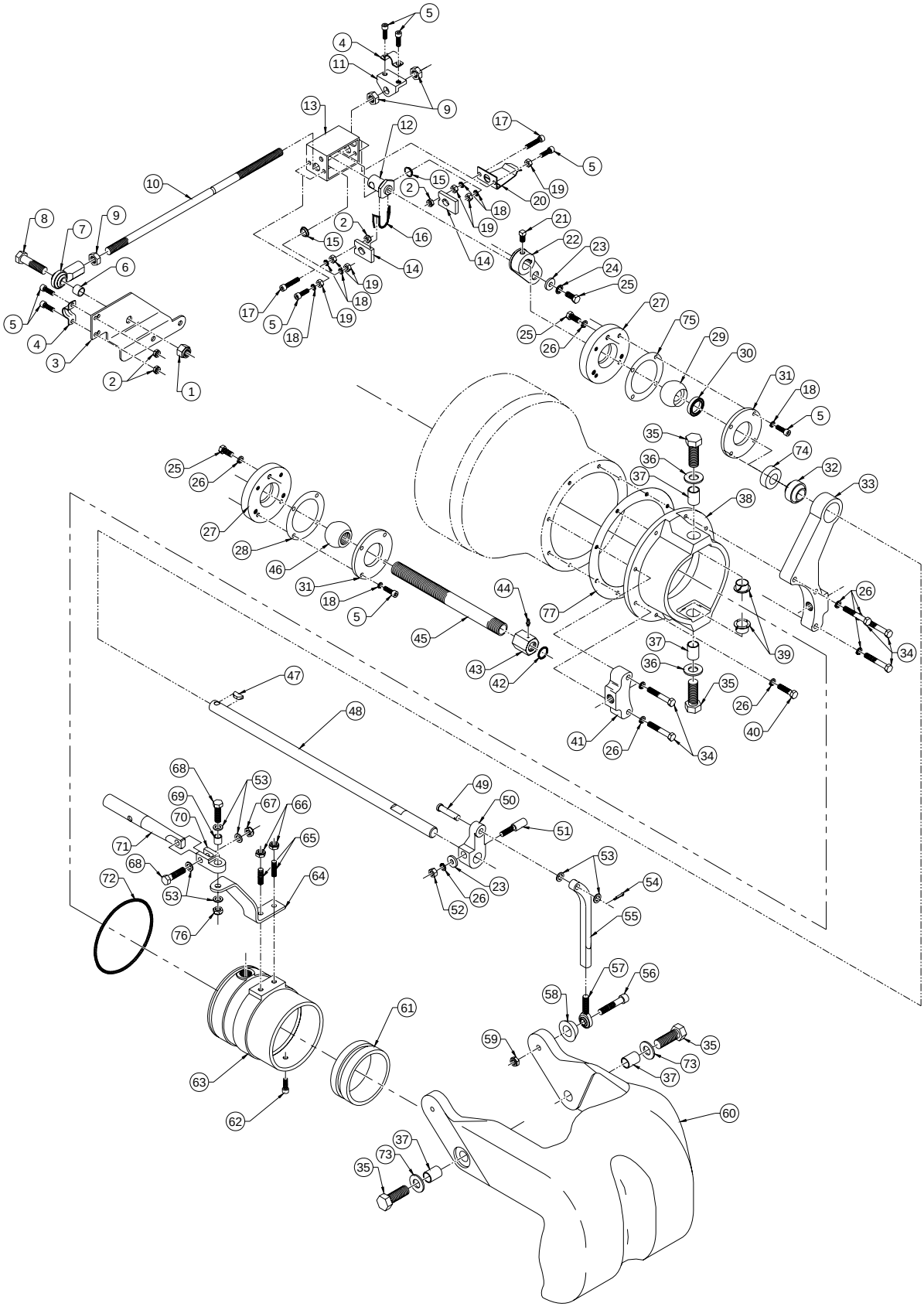
HTR II ADJUSTMENTS





AMERICAN TURBINE

EXPLODED VIEW AA



AMERICAN TURBINE

HTR II STEERING (W / R1007)

PART # RSK2101

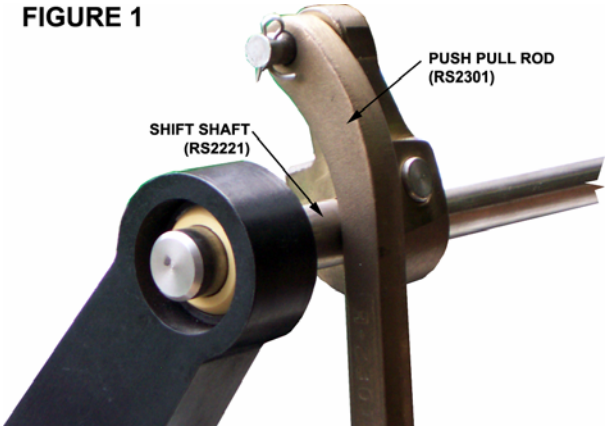
LEGEND

SYM.	DESCRIPTION	QTY.	PART NO.
1	LOCK NUT, 1/2-13	1	F08 13 LN
2	LOCK NUT, 1/4-20	4	F04 20 LN
3	CONTROL ROD BRACKET	1	RS1001
4	64 SERIES CABLE CLAMP	1	RS5801
5	SHCS, 1/4-20 X 7/8	12	F04 20 07 SH
6	PLASTIC BUSHING	1	BN2010
7	FEMALE ROD END, 1/2-20	1	F08 20 FRE
8	HHCS, 1/2-13 X 1-3/4	1	F08 13 14 HH
9	JAMB NUT, 1/2-20	3	F08 20 JN
10	BRAKE ROD	1	RS5101
11	CABLE BRACKET	1	RS6101
12	LOCK HUB	1	RS3101
13	LOCK HOUSING	1	RS2901
14	LOCK PLATE	2	RS3001
15	NYLINER BEARING	2	RS3201
16	LOCK BLOCK SPRING	1	RS2802
17	SHCS, 1/4-20 X 1-3/8	2	F04 20 11 SH
18	LOCK WASHER, 1/4	13	F04 LW
19	HEX NUT, 1/4-20	6	F04 20 HN
20	DETENT SPRING	1	RS2701
21	SHCS, 5/16-18 X 1/2	1	F05 18 04 SH
22	LEVER ARM (SHIFT SHAFT)	1	RS5201
23	THICK WASHER, 5/16	1	F05 TW
24	STAR LOCK WASHER, 5/16	1	F05 SW
25	HHCS, 5/16-18 X 3/4	7	F05 18 06 HH
26	LOCK WASHER, 5/16	15	F05 LW
27	BEZEL (SHIFT ROD / STEERING)	2	RS5001
28	GASKET	1	G4001
29	SHIFT ROD BALL	1	RS5621
30	SHIFT ROD SEAL	1	RS5601
31	BALL FLANGE	2	T2701
32	SPERICAL BEARING	1	RS5351
33	PIVOT BRACKET (STARBOARD)	1	RS2201
34	HHCS, 5/16-18 X 2-1/4	5	F05 18 18 HH
35	HHCS, 5/8-11 X 1-3/4	4	F10 11 14 HH
36	THICK WASHER, 5/8	2	F10 TW
37	BUSHING (BUCKET PIVOT)	4	RS2131
38	NOZZLE HOUSING	1	R1007
39	NYLINER BEARING	2	B2007
40	HHCS, 5/16-18 X 1-1/4	3	F05 18 10 HH
41	PIVOT BRACKET (PORT)	1	RS2501
42	O-RING, STEERING CABLE SEAL	1	O3501
43	STEERING TUBE SEAL	1	T3107
44	GREASE ZERK	1	M4801
45	STEERING TUBE	1	T3007
46	STEERING TUBE BALL	1	T2601
47	WOODRUFF KEY	1	R5507
48	SHIFT SHAFT	1	RS5221
49	CLEVIS PIN, 3/8	1	F06 CL
50	REVERSE LEVER ARM	1	RS2401
51	TAPER PIN	1	RS3501
52	HEX NUT, 5/16-18	1	F05 18 HN
53	AN FLAT WASHER, 3/8	6	F06 AN
54	COTTER PIN, 1/8 X 1/2	1	F02 04 CP
55	PUSH PULL ROD	1	RS2301
56	SHCS, 3/8-24 X 2	1	F06 24 16 SH
57	MALE ROD END, 3/8-24	1	F06 24 MRE
58	TAPERED SLEEVE	1	RS2621
59	THIN LOCK NUT, 3/8-24	1	F06 24 TL
60	REVERSE BUCKET	1	RS2101
61	NOZZLE INSERT	1	R7370
62	SHCS, 5/16-18 X 1	1	F05 18 08 SH
63	NOZZLE, STEERING	1	R2001
64	TILLER ARM	1	RS2911
65	SET SCREW, 5/16-18 X 1-1/2	2	F05 18 12 SS
66	LOCK NUT, 5/16-18	2	F05 18 LN
67	THIN LOCK NUT, 3/8-24	1	F06 24 TL
68	HHCS, 3/8-24 X 1-1/2	2	F06 24 12 HH
69	BRONZE BUSHING 3/8 X 1/2	1	RS2623
70	CLEVIS	1	R8007
71	STEERING EXTENSION	1	R9601
72	O-RING, STEERING NOZZLE	1	O1505
73	THICK WASHER, 5/8	2	F10 TW
74	PLASTIC COLLAR	1	RS6201
75	GASKET, SHIFT SHAFT	1	G4001
76	LOCK NUT, 3/8-24	1	F06 24 LN
77	NOZZLE HOUSING GASKET	1	G2507

AMERICAN TURBINE

HTR II REVERSE BUCKET ADJUSTMENT

FIGURE 1



1. Shift the forward reverse lever into reverse.
2. Observe that the push-pull rod is resting against the shift shaft. If it is not; disconnect the shift cable from the brake box, push the brake box to the starboard side until the push-pull rod is resting against the shift shaft. Without moving the brake box extend the shift cable (see note) then re-connect to the brake box (use loctite). If the cable does not reach re-adjust the cable at the shifter. Check adjustment by shifting into reverse, grab reverse bucket by hand and try to move into forward.

NOTE: If the shift lever is hard to operate you have a shifter cable problem.

3. Check the reverse bucket height. Shift into reverse steer to full starboard, the bucket should just touch the nozzle. If it does not; remove the clevis pin that connects the lever and the push-pull rod. Rotate CW to lower, CCW to raise.

FIGURE 2

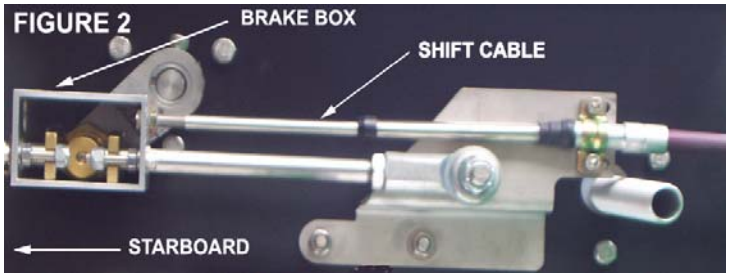
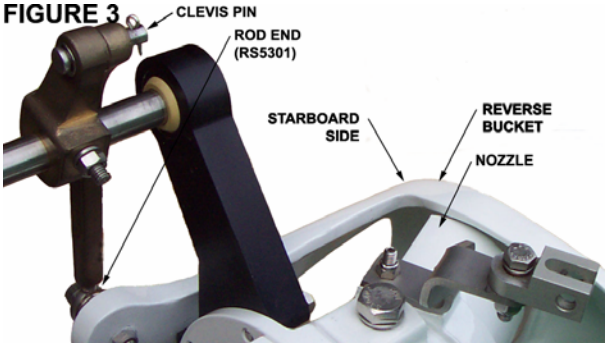


FIGURE 3



4. Observe that the push-pull rod and shift lever are not binding during the shift. If they are; loosen the taper (lock) pin, slide the shift lever along the shaft until the two do not bind. Tighten the taper (lock) pin and retest.

5. Observe that the shaft lock collar is 3/16” fro the plastic ball when the bucket is in the full forward position.

FIGURE 4

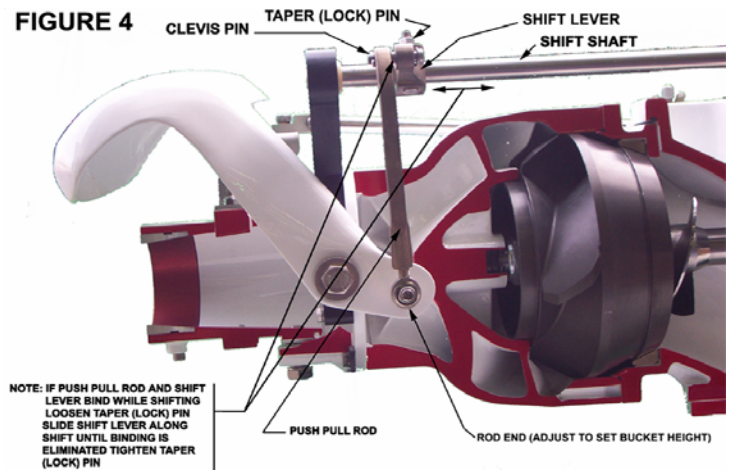
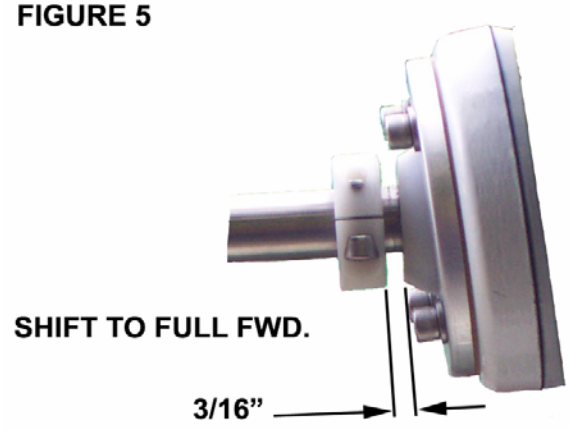

CLEVIS PIN
TAPER (LOCK) PIN
SHIFT LEVER
SHIFT SHAFT
NOTE: IF PUSH PULL ROD AND SHIFT LEVER BIND WHILE SHIFTING LOOSEN TAPER (LOCK) PIN SLIDE SHIFT LEVER ALONG SHIFT UNTIL BINDING IS ELIMINATED TIGHTEN TAPER (LOCK) PIN
PUSH PULL ROD
ROD END (ADJUST TO SET BUCKET HEIGHT)

FIGURE 5



AMERICAN TURBINE

TROUBLE SHOOTING HTR II

HARD SHIFTING INTO REVERSE

ENGINE RUNNING

Engine must be warmed up and not idling above 750 RPM
Adjust idle

If shifting continues to be difficult make sure that in the process of shifting the engine rpm does not increase.

NOTE: Some shifters have been imparting movement into the throttle linkage causing the engine rpm to increase.

ENGINE NOT RUNNING
SEE FIGURES 4 & 5

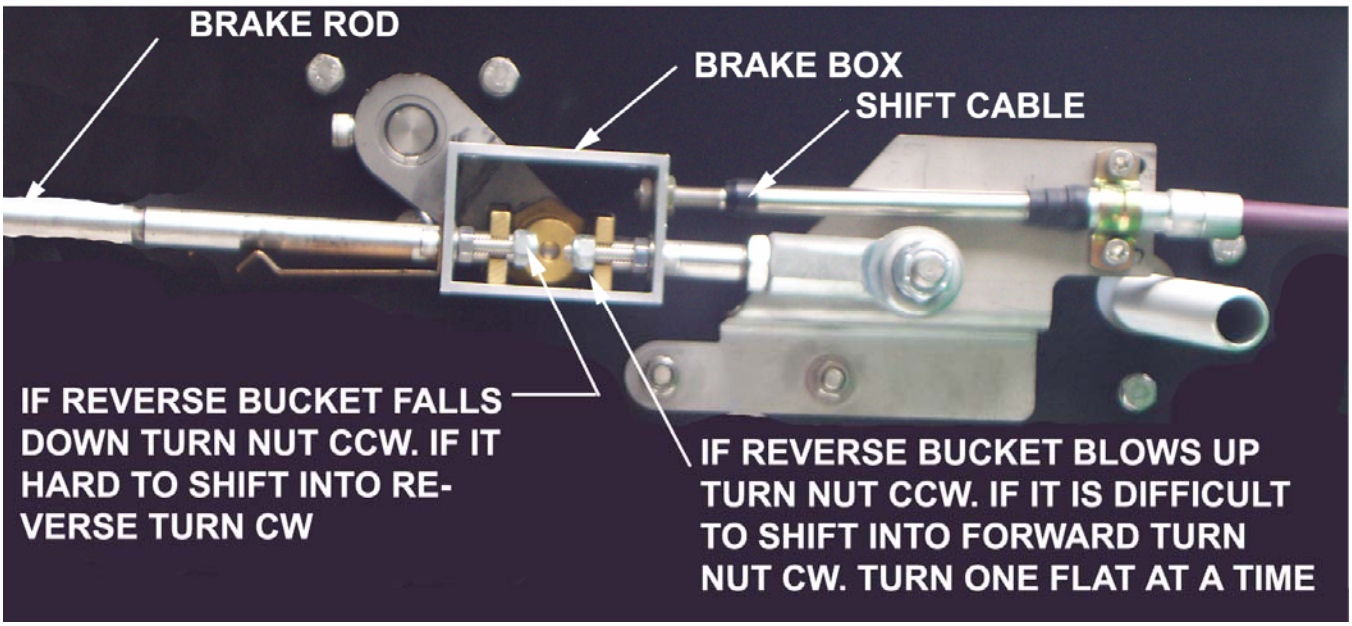
If hard shifting continues remove clevis pin from push-pull rod and shift lever. Lift reverse bucket it must move freely, if not; pivot bolts may have been over tightened and swelled in the hole, if so replace bushings and torque to 45 ft/lb and use loctite.

Check for corrosion, clean and lubricate if needed.

Before re-connecting shift lever operate shift lever at helm. Does it shift without much effort? If not loosen the (4) socket head fasteners figure (5). If that eases the shifting add a gasket (G4001) and tighten bolts.

FIGURE 6

See figure 6 for brake box adjustments.


BRAKE ROD
BRAKE BOX
SHIFT CABLE
IF REVERSE BUCKET FALLS DOWN TURN NUT CCW. IF IT HARD TO SHIFT INTO REVERSE TURN CW
IF REVERSE BUCKET BLOWS UP TURN NUT CCW. IF IT IS DIFFICULT TO SHIFT INTO FORWARD TURN NUT CW. TURN ONE FLAT AT A TIME

NOTE: Brake boxes are set at the factory. Perform all other adjustments first

Clean with brake clean, do not use oil or grease.

AMERICAN TURBINE

HYDRAULIC TRIM PUMP DIAGRAM

NOTE: Plastic fittings are included to seal hydraulic as they pass through the transom.
Drill the transom w/ 7/16” & tap ½-20.
Use automatic transom fluid. Cycle up and down several times then bleed all lines